

A1-F18AC-SRM-231

1 May 1999

TECHNICAL MANUAL

ORGANIZATIONAL, INTERMEDIATE, AND DEPOT MAINTENANCE

STRUCTURE REPAIR CENTER FUSELAGE

NAVY MODEL
F/A-18A AND F/A-18B
161353 AND UP

N00140-93-D-AC68

This manual supersedes A1-F18AC-SRM-231, dated 15 February 1989,
including Change 8, dated 1 March 1996.

This volume is one of two volumes and is incomplete without A1-F18AC-SRM-230. This volume contains WP020 00 through WP041 00.

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NATEC ELECTRONIC MANUAL

NUMERICAL INDEX OF EFFECTIVE WORK PACKAGES/PAGES

List of Current Changes

Original 0 1 May 99

Only those work packages/pages assigned to the manual are listed in this index. Insert Change __, dated _____. Dispose of superseded work packages/pages. Superseded classified work packages/pages shall be destroyed in accordance with applicable security regulations. If changed pages are issued to a work package, insert the changed pages in the applicable work package. The portion of text affected in a change or revision is indicated by change bars or the change symbol "R" in the outer margin of each column of text. Changes to illustrations are indicated by pointing hands, change bars, or MAJOR CHANGE symbols. Changes to diagrams may be indicated by shaded borders.

WP Number	Title	WP Number	Title
Title		025 01	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y488.000 Through Y518.000 Effectivity: 161742 and Up
Page A	Numerical Index of Effective Work Packages/Pages		
TPDR	List of Technical Publications Deficiency Reports Incorporated	026 00	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y518.000 Through Y557.500 Effectivity: 161353 Thru 161741
HMWS	Warnings Applicable to Hazardous Materials		
020 00	Organizational Maintenance Structure Repair Number 2 and 3 Fuel Tank Floors and Foam Fillers	026 01	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y518.00 Through Y557.500 Effectivity: 161742 and Up
021 00	Organizational Maintenance Structure Repair Number 2 Fuel Tank Bulkhead Foam Fillers	027 00	Organizational and Intermediate Maintenance Structure Repair Aft Center Fuselage Graphite Epoxy Skin and Aluminum Honeycomb Core Covers
022 00	Organizational Maintenance Structure Repair Number 3 Fuel Tank Bulkhead Foam Fillers	028 00	Organizational Maintenance Structure Repair Aft Center Fuselage Alclad Skin and Aluminum Honeycomb Core Cover (Door 55)
023 00	Organizational Maintenance Structure Repair Number 4 Fuel Tank Floor and Webs Effectivity: 161353 thru 161741	029 00	Organizational Maintenance Structure Repair Aft Center Fuselage Aluminum and Titanium Covers and Doors, Y453.000 Through Y518.000, Damage Evaluation and Repairs
023 01	Organizational Maintenance Structure Repair Number 4 Fuel Tank Floor and Webs Effectivity: 161742 and Up	029 01	Organizational and Depot Maintenance Structure Repair Aft Center Fuselage Aluminum and Titanium Covers and Doors, Y453.000 through Y518.000, Replacements
024 00	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y453.000 Through Y488.000 Effectivity: 161353 Thru 161741	030 00	Organizational, Intermediate and Depot Maintenance Structure Repair Aft Center Fuselage Aluminum Covers and Doors, Y518.000 Through Y557.500, Damage Evaluation and Repairs
024 01	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y453.000 Through Y488.000 Effectivity: 161742 and Up		
025 00	Organizational Maintenance Structure Repair Number 4 Fuel Tank Foam Fillers, Y488.000 Through Y518.000 Effectivity: 161353 Thru 161741		

NUMERICAL INDEX OF EFFECTIVE WORK PACKAGES/PAGES (Continued)

WP Number	Title	WP Number	Title
030 01	Organizational Maintenance Structure Repair Aft Center Fuselage Aluminum Covers and Doors, Y518.000 Through Y557.500, Replacements	036 00	Depot Maintenance Structure Repair Main Landing Gear Support Fittings Alignment Device, RE174324001-1(LH) and RE174324001-2 (RH)
031 00	Organizational and Intermediate Maintenance Structure Repair Main Landing Gear Forward Door	037 00	Depot Maintenance Structure Repair Center Fuselage Wing Attach Lugs Check Fixture Part No. RE174110000-1/-2
032 00	Organizational and Intermediate Maintenance Structure Repair Main Landing Gear Inboard Door	038 00	Depot Maintenance Structure Repair Center Fuselage Wing Attach Points Reaming Tool Set Part No. RE374320000-1
033 00	Organizational and Intermediate Maintenance Structure Repair Main Landing Gear Outboard Door	039 00	Depot Maintenance Structure Repair Engine Air Inlet Maintenance Fixture, RE174322020-1 (LH)
034 00	Organizational and Depot Maintenance Structure Repair Center Fuselage Internal Access Covers	040 00	Depot Maintenance Structure Repair Engine Air Inlet Maintenance Fixture, RE174322020-2 (RH)
035 00	Organizational, Intermediate and Depot Maintenance Structure Repair Center Fuselage Sealing Requirements	041 00	Depot Maintenance Structure Repair Engine Air Inlet Installation Alignment Fixture, RE474322020-1/-2

Total number of pages in this manual is 736 consisting of the following:

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
Title	0	023 00		028 00		034 00	
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B	0	26 Blank	0	029 00		22 Blank	0
C Blank	0	023 01		1 - 28	0	035 00	
TPDR-1	0	1 - 10	0	029 01		1 - 10	0
TPDR-2 Blank	0	024 00		1 - 30	0	036 00	
HMWS-1	0	1 - 25	0	030 00		1 - 12	0
HMWS-2	0	26 Blank	0	030 01		037 00	
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HMWS-5	0	025 00		1 - 27	0	038 00	
HMWS-6	0	1 - 13	0	28 Blank	0	1 - 20	0
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12 Blank	0	36 Blank	0				

LIST OF TECHNICAL PUBLICATIONS DEFICIENCY REPORTS INCORPORATED
ORGANIZATIONAL, INTERMEDIATE, AND DEPOT MAINTENANCE
STRUCTURE REPAIR
CENTER FUSELAGE

1. The TPDRs listed below have been incorporated in this issue.

Identification Number/
QA Sequence Number

09679-99-9026

Location

Page A

WARNINGS APPLICABLE TO HAZARDOUS MATERIALS

Warnings for hazardous materials listed in this manual are designed to warn personnel of hazards associated with such items when they come in contact with them by actual use. Additional information related to hazardous materials is provided in OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) Program Manual, NAVSUPINST 5100.27, Navy Hazardous Material Control Program, and the DOD 6050.5, Hazardous Materials Information System (HMIS) series publications. For each hazardous material used within the Navy, a material safety data sheet (MSDS) is required to be provided and available for review by users. Consult your local safety and health staff concerning any questions on hazardous chemicals, MSDS's, personal protective equipment requirements, and appropriate handling and emergency procedures and disposal guidance.

Complete warnings for hazardous materials referenced in this manual are identified by use of an icon, nomenclature and specification or part number of the material, and a numeric identifier. The numeric identifiers have been assigned to the hazardous materials in the order of their appearance in the manual. Each hazardous material is assigned only one numeric identifier. Repeated use of a specific hazardous material references the numeric identifier assigned at its initial appearance. The approved icons and their applications are shown below in Explanation of Hazardous Symbols.

In the text of the manual, the caption **WARNING** will not be used for hazardous materials. Such warnings will be identified by an icon and numeric identifier. The material nomenclature will also be provided. The user is directed to refer to the corresponding numeric identifier listed in this WP under the heading HAZARDOUS MATERIALS WARNINGS for the complete warning applicable to the hazardous material.

Biohazard



Fire



Breathing Hazard



Highly Toxic

Corrosive
(Caustic or Acidic)

Ingestion Hazard



Cryogenic



Oxidizer



Explosive



Radiation



Eye Protection



Skin Hazard



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HMWS-2

EXPLANATION OF HAZARDOUS SYMBOLS



The abstract symbol shows a material that may contain bacteria or viruses that present a health hazard.



The symbol of a human figure in a cloud shows that breathing this material can present a health hazard.



The symbol of drops of a liquid burning a hand shows a material that causes burns to human skin or tissue.



The symbol of a hand in a block of ice shows a material is so cold it will burn your skin on contact.



The rapidly expanding symbol shows that the material may explode if subjected to high temperature, sources of ignition, or high pressure.



The symbol of a person wearing goggles shows a material that can injure your eyes.



The symbol of a fire shows that a material can ignite and burn you.



The symbol of a skull and crossbones shows a material that is highly toxic and can be a danger to life and health.



The symbol of a liquid entering the mouth shows that eating or drinking this material can cause a health hazard.



The symbol of an "O" with a flame shows a material that will promote fire and cannot be stored near flammable or organic materials.






The symbol of three circular wedges shows that the material emits radioactive energy and can injure human tissue or organs.



The hand symbol shows a material that can irritate the skin or enter the body through the skin and cause a health hazard.

HAZARDOUS MATERIALS WARNINGS















<u>Index</u>	<u>Material</u>	<u>Warning</u>
1	Methyl Ethyl Ketone, TT-M-261	<p>Methyl Ethyl Ketone (MEK), TT-M-261, is flammable - do not use near open flames, near welding areas, or on hot surfaces. Do not smoke when using it, and do not use it where others are smoking. Contact with liquid or vapor can cause skin irritation, dermatitis and drowsiness. If there is any prolonged skin contact, wash contacted area with soap and water. Remove solvent saturated clothing. If vapors cause drowsiness, go to fresh air. If irritation persists, get medical attention. When handling liquid at air-exhausted workbench, wear approved gloves, goggles and long sleeves. When handling liquid or liquid-soaked cloth in open unexhausted area, wear approved respirator, gloves and goggles. Dispose of liquid soaked rags in approved metal container. Metal containers of solution must be grounded to maintain electrical continuity.</p>
		
2	Adhesive, EA934	<p>Adhesive, EA934, is toxic. Avoid breathing of vapors. Avoid contact with skin or eyes. Wear gloves and goggles while handling. If eye contact is made, wash immediately with large amount of water. If skin contact is made, wash immediately with soap and water.</p>
		
3	Adhesive, Eccobond 64C	<p>Adhesive, Eccobond 64C, is flammable. Do not use near open flames, welding areas or on hot surfaces. When decomposed by heating, toxic fumes are released. Do not smoke when using resins and hardeners and do not use where others are smoking. Contact with liquid or vapor can irritate skin and respiratory tract. Repeated exposure can cause skin sensitization. If liquid contacts skin or eyes, immediately flush affected area with water. If vapors are inhaled, go to fresh air. When handling liquid or mixed compound at air-exhausted workbench, wear approved gloves and goggles. When handling liquid or mixed compounds at open unexhausted area, wear approved respirator, gloves, apron and goggles. Metal containers of solution must be grounded to maintain electrical continuity.</p>
		

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HAZARDOUS MATERIALS WARNINGS (Continued)

<u>Index</u>	<u>Material</u>	<u>Warning</u>
4	Adhesive, EA-956, EA-960, EC-1614A/B, EC-2216A/B, A-66 Epoxy, MMM-A-134, Epocast 50A	Adhesives (Epoxy adhesives EC-1614A/B, EC-2216A/B, A-66 Epoxy, MMM-A-134, Epocast 50A, EA-956, EA-960) are composed of resins and hardeners or curing agents that contain toxic ingredients that can cause irritation to eyes, skin or respiratory tract. If adhesive contacts eyes, flush immediately with large quantities of water and seek medical attention. If it contacts skin, wash thoroughly with soap and water. Prolonged or repeated contact may cause allergic reaction in susceptible persons. Use only with adequate ventilation. Wear approved protective gloves and safety glasses. Wash hands thoroughly after handling. Do not inhale vapors during curing. If spilled on clothing, wash clothes before wearing again. If spilled, completely clean up area of spillage. To avoid exotherm (heat release), mix no more than 5 cubic inches (approximately 130 grams) of this material at one time. Incinerate properly in accordance with local regulations.
	  	
5	Adhesive, Silastic 732 RTV	Silastic 732 RTV adhesive is toxic to skin, eyes, and respiratory tract. Skin and eye protection required. Avoid repeated or prolonged contact. Good general ventilation is generally enough.
	   	
6	Sealing Compound, MIL-S-8802	Sealants are toxic. Prolonged breathing of vapors from organic solvents or materials containing organic solvents is dangerous. Rubber gloves shall be used. Wash hands thoroughly with soap and water before eating, drinking, or smoking. Contains chromates; follow approved toxic waste disposal procedures.
	  	
7	Sealing Compound, MIL-S-83430	Sealing compound, MIL-S-83430, is flammable and toxic to eyes, skin and respiratory tract. Prolonged overexposure via inhalation may cause liver and/or kidney damage. Protection: chemical splashproof goggles and solvent resistant gloves. Keep compound off skin and eyes. Keep away from open flames or other sources of ignition. Use only in well ventilated areas. Insure good personal hygiene prior to eating, drinking or smoking.
	   	

HAZARDOUS MATERIALS WARNINGS (Continued)


















<u>Index</u>	<u>Material</u>	<u>Warning</u>
8	Adhesive, FM300	Adhesive film, FM300, is toxic. Avoid prolonged or repeated skin contact. Avoid contact with eyes. Do not handle or store near heat, open flame, sparks, strong bases or strong acids. Store at or below 0°F to prolong shelf life. Wash hands thoroughly after each use. Protection: white cotton gloves worn over plastic gloves; Use dust mask during grinding/cutting cured resin, half-mask respirator with organic vapor cartridge required in poorly ventilated areas.
	    	
9	Epoxy Primer Coatings, Chemical and Solvent Resistant, MIL-P-23377TY2, MIL-P-23377F Type I/II, Class 2	Chemical and solvent resistant epoxy primer coatings, MIL-P-23377F, Type I/II, Class 2, is toxic and flammable. Prevent prolonged or repeated breathing of vapors or spray mist. May cause allergic reaction. Avoid contact with skin and eyes. Store tightly closed in a cool, dry, well ventilated area. Launder contaminated clothing before re-use. Protection: full face-piece continuous-flow supplied air respirator, neoprene gloves, chemical goggles, faceshield and protective skin compound; protective clothing required during spraying operations.
	    	
10	Sealing Compound, PR-1422-G-A-2	Sealants are toxic and will cause serious injury if handled improperly. Prolonged breathing of vapors from organic solvents or materials containing organic solvents is dangerous. Wash hands thoroughly with soap and water before eating, drinking, or smoking. Protection: Wear acid resistant gloves, protective face shield and approved protective clothing. Follow approved toxic waste disposal procedures.
	   	
11	Adhesive, EA 9321 A/B	Adhesive, EA 9321 A/B, is toxic and flammable. Avoid contact with skin and eyes. Use in well ventilated area and avoid breathing vapors. Wash hands thoroughly after each use. Close container after usage. Store in a cool, dry and well ventilated area. Avoid contact with strong oxidizing agents. Protection: rubber gloves, chemical resistant goggles and protective skin compound; respirator with organic vapor cartridge required in poorly ventilated areas. Manufacturers' hazards may vary. Always consult proper MSDS.
	    	

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HAZARDOUS MATERIALS WARNINGS (Continued)

<u>Index</u>	<u>Material</u>	<u>Warning</u>
12	Metal Cleaner, 222555	Metal cleaner, 222555, is an extremely hazardous liquid. It can cause irritation of skin, eyes, nose and throat. Avoid contact with skin and clothing. Wear rubber gloves, face shield, rubber apron and respirator while handling. Always work in a well ventilated area. If solution contacts the skin or eyes, wash immediately with large quantities of water for 15 minutes or more, then secure first aid.
	  	
13	Adhesive Primer, BR-127	Corrosion inhibiting adhesive primers (CIAP PL-718-2, EC-3917, EC-3924, BR-127) contain organic solvents that are flammable. Do not use on hot surfaces or near sources of ignition. Avoid skin contact and breathing of vapors. Use only with adequate ventilation. Prolonged or repeated breathing of vapors is dangerous. Respirators and goggles must be worn if primer is applied by spray or aerosol application. Prolonged or repeated skin contact can have a toxic effect on affected skin area. Protective gloves shall be worn when using or handling adhesive primer. Contains chromates. Follow approved toxic waste disposal procedures.
	   	
14	Release Agent, Fluorocarbon Lubricant, MS-122	Fluorocarbon lubricant, MS-122, is toxic and can release poison gas when heated. Excessive inhalation during normal use can cause dizziness, narcosis, and eye irritation. It can also contaminate smoking tobacco. Do not smoke tobacco exposed to the lubricant. Do not breathe vapors. Avoid contact with eyes and skin. Mild skin irritant. No smoking in area where fluorocarbon lubricant is used. Use in well ventilated area. Protection: Chemical splash proof goggles, gloves and good ventilation. Ensure good personal hygiene prior to eating, drinking or smoking.
	   	
15	Cleaning Compound, MIL-C-38736	Cleaning compound, MIL-C-38736, irritates skin, nose, throat and respiratory tract. Avoid repeated/prolonged contact. Avoid heat, sparks, flames, and strong oxidizing agents. Keep away from open flames or other sources of ignition. Use only in well-ventilated areas. Protection: Full-face atmosphere supplying respirator, chemical resistant gloves and chemical goggles.
	     	

HAZARDOUS MATERIALS WARNINGS (Continued)

<u>Index</u>	<u>Material</u>	<u>Warning</u>
16	Methyl Isobutyl Ketone (MIBK), TT-M-213	Methyl isobutyl ketone (MIBK) TT-M-213 is toxic, flammable, and irritating to eyes and skin. Overexposure may cause dizziness, narcosis, nausea and vomiting. Do not use in confined areas. Protection: Chemical splash proof goggles, gloves, and good ventilation. Keep container closed. Keep sparks, flames, and heat away. Keep MIBK off skin, eyes, and clothes. Do not breathe vapors. Use of respiratory protection may be required, depending on work task(s) and location. Insure good personal hygiene prior to eating, drinking, or smoking.
	    	
17	Chemical Conversion Coating for Aluminum, MIL-C-81706	Chemical Conversion Coating for Aluminum (Alo-dine), MIL-C-81706, is highly reactive; do not mix with oxidizable materials such as cloth, paper, or wood. When mixing solutions, add acid to water, not water to acid. Contact with powder can cause severe skin and eye irritation and skin ulcers. Inhalation or ingestion can result in nasal and kidney damage. If any liquid or powder contacts skin or eyes, immediately flush affected area thoroughly with water. Immediately change any contaminated clothing. If skin disorders appear, get medical attention. When handling powder at air-exhausted workbench or tank, wear approved gloves and apron. When handling or when mixing it into solution at unexhausted workbench, wear approved respirator, gloves, and apron. Do not eat, smoke, or carry smoking materials in areas where powder is handled. Contains chromates. Follow approved toxic waste disposal procedures.
	 	
18	Beryllium	Beryllium and its compounds are considered to be human and experimental carcinogens, tumorigens, and neoplastigens. Compounds may enter the body through inhalation of dust and fumes and may act locally on the skin. Even alloys of low beryllium content have been shown to be dangerous. Inhalation of the dust can cause severe lung damage with symptoms appearing within months. Exposure may result in fibrosis. Beryllium and its compounds are on the Community Right to Know List. Respirator apparatus must be used when drilling, grinding, sanding, or abrading beryllium alloys. Skin/eye protection are required. Avoid repeated/prolonged contact.
	    	

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 2 AND 3 FUEL TANK FLOORS AND FOAM FILLERS

Reference Material

Fuel System	A1-F18AC-460-300
No. 2 Fuel Tank Cavity Foam Filler	WP021 01
No. 3 Fuel Tank Cavity Foam Filler	WP025 01
Fuel Tank Cavity Preparation	WP039 00
Structure Repair, General Information	A1-F18AC-SRM-200
Introduction	WP002 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Aluminum Patch Fabrication	WP006 01
Aluminum, Graphite Epoxy, or Titanium Patch Installation and Removal	WP007 00
Blending	WP038 00
Aircraft Weapons System Cleaning and Corrosion Control	NAVAIR 01-1A-509

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Floors Damage Evaluation	2
Negligible Damage	2
Repairable Damage	2
Foam Fillers Replacement	3

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

None

1. **FLOORS DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Types of materials used are shown on figure 1. Repair zones are shown on figure 2. Allowable damage limits within repair zones are listed in tables 1 and 2. Damage not listed or exceeding following limits require depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches (NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

a. Scratches are not allowed within one diameter from edge of any hole.

b. Smooth dents only, effective diameter at least 20 times depth.

4. **REPAIRABLE DAMAGE.** Types and limits of damage are listed below and in table 2 coincide with figure and index numbers in material index.

NOTE

Limits in table 2 apply after blending damage.

a. Scratches.

(1) Any scratches within one diameter of any hole must be blended out. Minimum blend out is one diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.

c. Cracks. All cracks must be repaired.

d. Holes.

(1) Damage in areas free of structure and lands must have edge of cleanup hole at least eight repair fastener diameters from any land, internal structure, or existing row of fasteners.

(2) Damage to lands, over structure. Only one repair per land.

e. Dents exceeding limits in table 1 must be repaired.



Make sure all sharp edges have been removed from fuel tank cavities after repair (A1-F18AC-460-300, WP039 00). Damage to fuel tank can be caused by sharp edges.

5. FLOOR REPAIRS.

6. Types of repairs are temporary, one-time flight, permanent, critical area, alternate, and typical. Repair type definitions are in structure repair terms (A1-F18AC-SRM-200, WP002 00).

7. PERMANENT REPAIRS.

8. Scratches, Nicks, Gouges, or Corrosion. Blend scratches, nicks, gouges, or corrosion (A1-F18AC-SRM-250, WP038 00). If after blending, the damage limits of table 2 are exceeded, repair aluminum sheet as below. Refinish blended areas (NAVAIR 01-1A-509).

a. Scratches - make crack or edge repair.

b. Nicks, gouges, or corrosion - make hole or edge repair.

9. Cracks. In repair zone C3 repair cracks free of structure or land areas in aluminum sheet (0.025 inch thick or less) as below:

a. Completely cut out crack in smallest diameter circle possible.

b. Fabricate patch (A1-F18AC-SRM-250, WP006 01).

c. Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

d. Refinish repaired area (NAVAIR 01-1A-509).

10. Holes. In repair zone C3 repair holes free of structure or land areas in aluminum sheet (0.025 inch thick or less) as below:

a. Completely cut out damage in smallest diameter circle possible.

b. Fabricate patch (A1-F18AC-SRM-250, WP006 01).

c. Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

d. Refinish repaired area (NAVAIR 01-1A-509).

11. Dents. In repair zone C3 repair dents free of structure or land areas in aluminum sheet (0.025 inch thick or less) as below:

a. Completely cut out dent in smallest diameter circle possible.

b. Fabricate patch (A1-F18AC-SRM-250, WP006 01).

c. Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

d. Refinish repaired area (NAVAIR 01-1A-509).

12. FOAM FILLERS REPLACEMENT.

13. For replacement of foam fillers (A1-F18AC-460-300, WP021 01 or WP025 01).

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (1)	Web						
	Zone B3	0.050	0.0006	0.0006	100%	0.025	10%
	Zone C3	0.030	0.0006	0.0006	100%	0.015	NA
	Zone C3	0.025	0.0006	0.0006	100%	0.013	NA

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (2)	Deck	0.050	0.0006	0.0006	100%	0.025	10%
	Zone B3	0.030	0.0006	0.0006	100%	0.015	NA
	Zone C3	0.080	0.0006	0.0006	100%	0.040	10%
	Zone C3	0.025	0.0006	0.0006	100%	0.013	NA
Fig 1 (3)	Web	0.050	0.0006	0.0006	100%	0.025	10%
	Zone B3	0.030	0.0006	0.0006	100%	0.015	NA
	Zone C3	0.025	0.0006	0.0006	100%	0.013	NA
Fig 1 (4)	Web	0.080	0.0006	0.0006	100%	0.040	10%
	Zone B3	0.040	0.0006	0.0006	100%	0.020	NA
	Zone C3	0.030	0.0006	0.0006	100%	0.015	NA
Fig 1 (5)	Deck	0.080	0.0006	0.0006	100%	0.040	10%
	Zone C3	0.050	0.0006	0.0006	100%	0.025	NA
Fig 1 (6, 7, 8)	Intercostal	0.130	0.0006	0.0006	100%	0.065	10%
	Zone B3	0.120	0.0006	0.0006	100%	0.060	10%
Fig 1 (9)	Intercostal	0.060	0.0006	0.0006	100%	0.030	10%
	Zone B3						

Table 2. Repairable Damage Limits After Blending

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (1)	Web	0.050	0.010	0.010	20%	0.010	20%
	Zone B3	0.030	0.006	0.006	15%	0.006	15%
	Zone B3	0.025	0.005	0.005	20%	0.005	20%
Fig 1 (2)	Deck	0.050	0.010	0.010	20%	0.010	20%
	Zone B3	0.030	0.006	0.006	10%	0.006	10%
	Zone C3	0.080	0.016	0.016	20%	0.016	20%
	Zone C3	0.025	0.005	0.005	20%	0.005	20%
Fig 1 (3)	Web	0.050	0.010	0.010	20%	0.010	20%
	Zone B3	0.030	0.006	0.006	10%	0.006	10%
	Zone C3	0.025	0.005	0.005	15%	0.005	15%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (4)	Web	0.080	0.016	0.016	20%	0.016	20%
	Zone B3	0.040	0.008	0.008	20%	0.008	20%
	Zone C3	0.030	0.006	0.006	20%	0.006	20%
Fig 1 (5)	Deck	0.080	0.016	0.016	20%	0.016	20%
	Zone B3	0.050	0.010	0.010	10%	0.010	10%
Fig 1 (6, 7, 8)	Intercostal	0.130	0.026	0.026	20%	0.026	20%
	Zone B3	0.120	0.024	0.024	20%	0.024	20%
Fig 1 (9)	Intercostal Zone B3	0.060	0.012	0.012	20%	0.012	20%

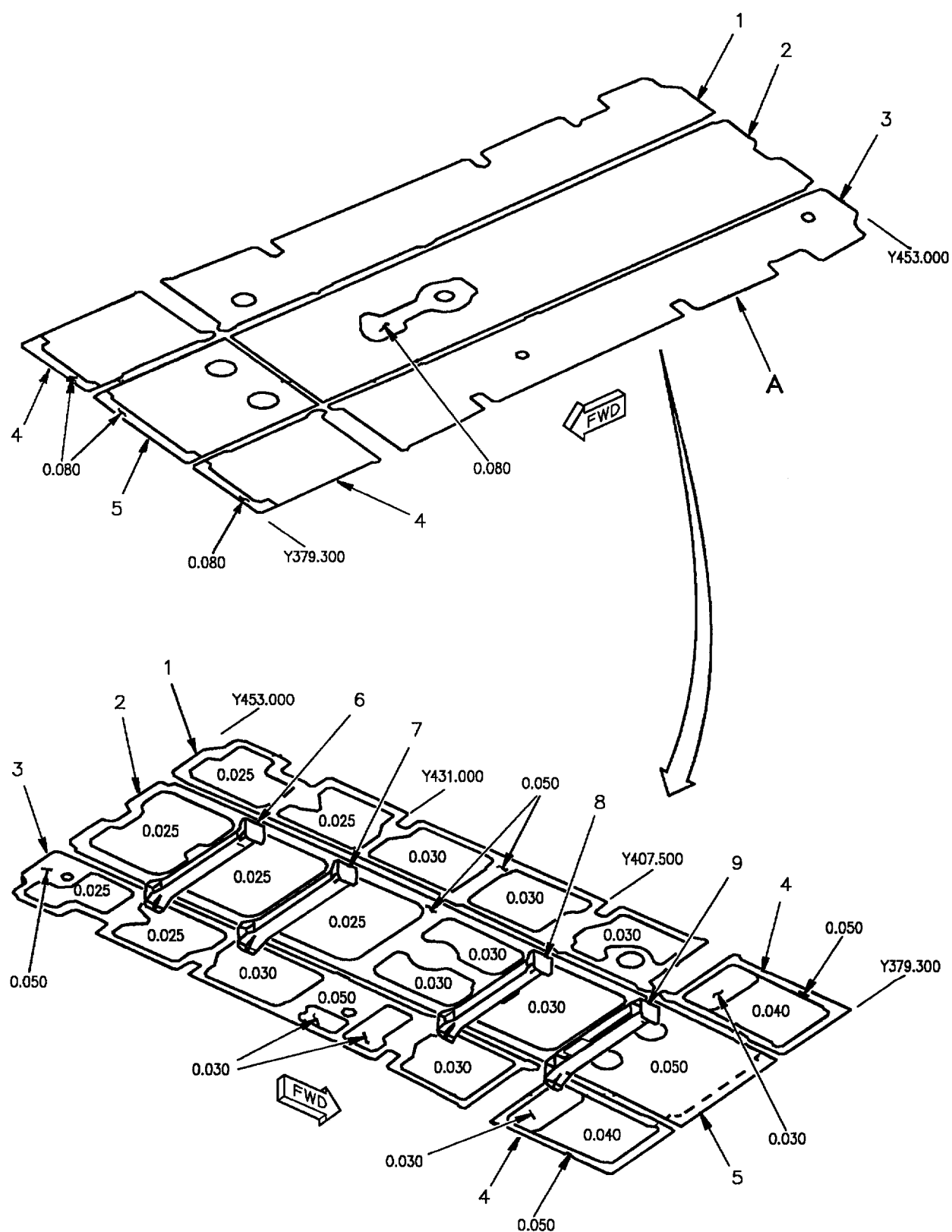


Figure 1. Material Index (Sheet 1)

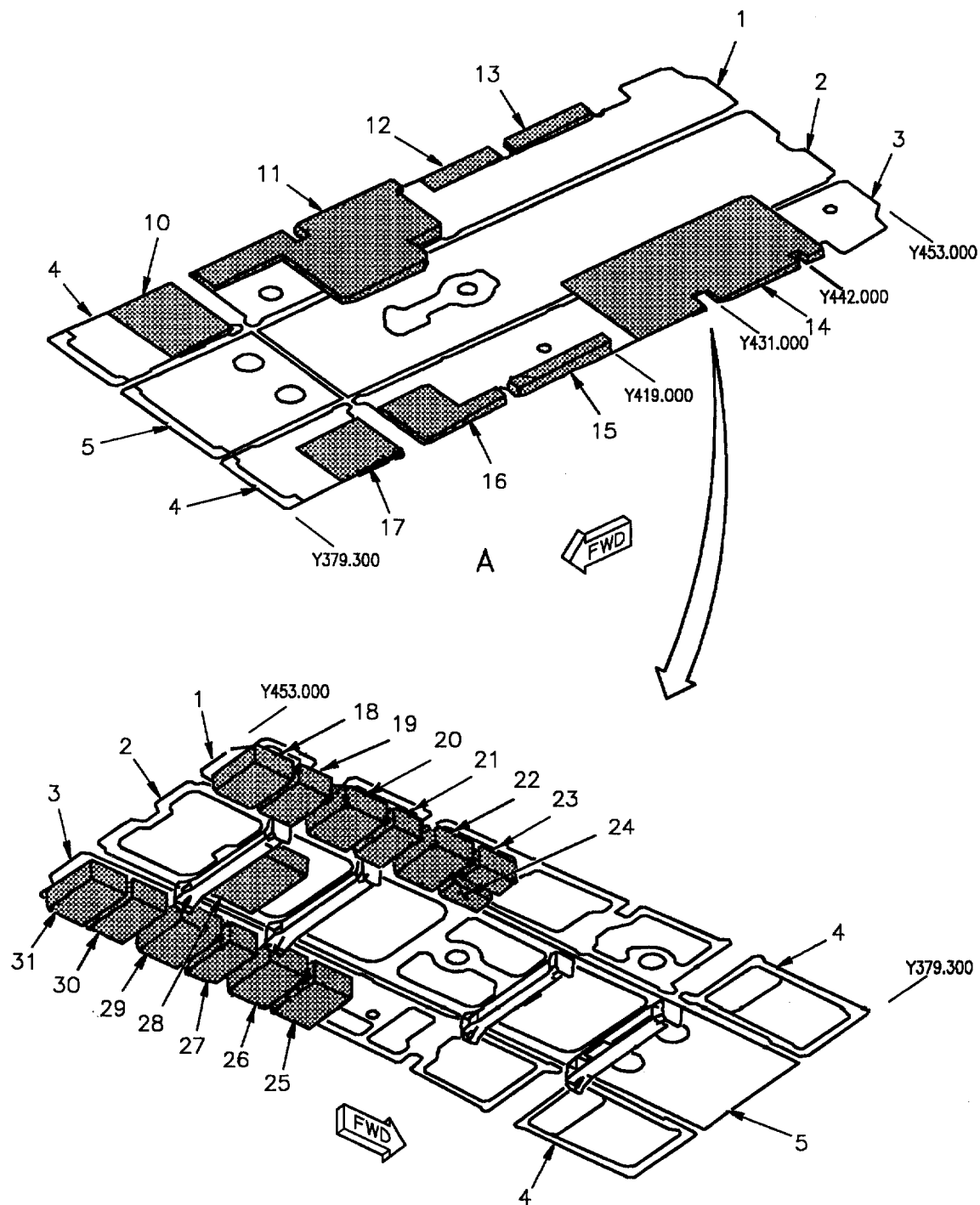


Figure 1. Material Index (Sheet 2)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1	<div>6</div> <div>10</div> <div>7</div> <div>16</div> <div>19</div> <div>18</div> <div>17</div>	Web 74A321430-9001 74A321430-2014 74A321430-2016 74A321430-9010 74A321430-9012 74A321430-9014 74A321430-2030	0.050 Sheet	7075-T6 Al Aly
2	<div>12</div> <div>13</div>	Deck 74A321400-2009 74A321400-2011	0.080 Sheet	7075-T6 Alclad
3	<div>6</div> <div>10</div> <div>7</div> <div>16</div> <div>19</div> <div>18</div> <div>17</div>	Web 74A321430-9002 74A321430-2013 74A321430-2015 74A321430-9009 74A321430-9011 74A321430-9013 74A321430-2027	0.050 Sheet	7075-T6 Al Aly
4	<div>14</div> <div>15</div>	Web 74A321430-2001, -2002 74A321430-2017, -2018	0.080 Sheet	7075-T6 Al Aly
5		Deck 74A321400-2003	0.080 Sheet	7075-T6 Alclad
6		Intercostal 74A321325-2007	Forging	7075-T73 Al Aly
7	<div>12</div> <div>13</div>	Intercostal 74A321325-2007 74A321325-2013	Forging	7075-T73 Al Aly
8	<div>12</div> <div>13</div>	Intercostal 74A321325-2007 74A321325-2011	Forging	7075-T73 Al Aly
9		Intercostal 74A321305-2001	Bar	7075-T73511 Al Aly
10		Filler (Foam) 74A586200-2233	0.18X 7.40X9.20	<div>2</div> <div>3</div>
11	<div>5</div> <div>4</div>	Filler (Foam) 74A586200-2235 74A586200-2271	1.52X 12.70X22.16	<div>2</div> <div>3</div>
12		Filler (Foam) 74A586300-2201	0.30X 1.60X7.30	<div>11</div> <div>3</div>

Figure 1. Material Index (Sheet 3)
























































Idx No.	Eft	Nomenclature and Part No.	Description	Material
13		Filler (Foam) 74A586300-2203	0.58X 1.60X9.40	 
14		Filler (Foam) 74A586300-2199	0.64X 11.35X22.30	 
15		Filler (Foam) 74A586200-2241	1.40X 1.52X10.36	 
16		Filler (Foam) 74A586200-2239	0.90X 6.80X10.15	 
17		Filler (Foam) 74A586200-2237	0.38X 6.80X7.40	 
18	 	Filler (Foam) 74A585008-2063 74A585008-2112		 
19	 	Filler (Foam) 74A585008-2026 74A585008-2110		 
20	 	Filler (Foam) 74A585008-2061 74A585008-2108		 
21	 	Filler (Foam) 74A585008-2024 74A585008-2106		 
22	 	Filler (Foam) 74A585008-2069 74A585008-2104		 
23	 	Filler (Foam) 74A585008-2059 74A585008-2102		 
24	 	Filler (Foam) 74A585008-2053 74A585008-2100		 
25	 	Filler (Foam) 74A585008-2021 74A585008-2117		 
26	 	Filler (Foam) 74A585008-2045 74A585008-2119		 

Figure 1. Material Index (Sheet 4)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
27	<div><div>14</div><div>15</div></div>	Filler (Foam) 74A585008-2023 74A585008-2121	<div><div>1</div></div>	<div><div>1</div><div>3</div></div>
28	<div><div>14</div><div>15</div></div>	Filler (Foam) 74A585008-2003 74A585008-2101	<div><div>1</div></div>	<div><div>1</div><div>3</div></div>
29	<div><div>14</div><div>15</div></div>	Filler (Foam) 74A585008-2047 74A585008-2123	<div><div>1</div></div>	<div><div>1</div><div>3</div></div>
30	<div><div>14</div><div>15</div></div>	Filler (Foam) 74A585008-2025 74A585008-2125	<div><div>1</div></div>	<div><div>1</div><div>3</div></div>
31	<div><div>8</div><div>9</div><div>15</div></div>	Filler (Foam) 74A585008-2049 74A585008-2099 74A585008-2127	<div><div>1</div></div>	<div><div>1</div><div>3</div></div>
LEGEND				
<div><div><div>1</div></div> Make from basil laminated sandwich panel, 1.7 +0.001 -0.000 inches thick.</div> <div><div><div>2</div></div> Make from HH-I-530 Type I, 2 pounds per cu. ft., Grade II, Class I.</div> <div><div><div>3</div></div> Bond foam using EC-847 adhesive - 3M Company, St. Paul, Minn. 04963.</div> <div><div><div>4</div></div> 161520 AND UP.</div> <div><div><div>5</div></div> 161353 THRU 161519.</div> <div><div><div>6</div></div> 161353 THRU 161521.</div> <div><div><div>7</div></div> 161522 THRU 161704.</div> <div><div><div>8</div></div> 161353 THRU 161705, 161707.</div> <div><div><div>9</div></div> 161706, 161708 THRU 161741.</div> <div><div><div>10</div></div> 161705 THRU 161741.</div> <div><div><div>11</div></div> Make from ERP 8747, No. 4 Density.</div> <div><div><div>12</div></div> 161353 THRU 161745.</div> <div><div><div>13</div></div> 161746 AND UP.</div> <div><div><div>14</div></div> 161353 THRU 161741.</div> <div><div><div>15</div></div> 161742 AND UP.</div> <div><div><div>16</div></div> 161742 THRU 161745.</div> <div><div><div>17</div></div> 161924 AND UP.</div> <div><div><div>18</div></div> 161746 THRU 161759.</div> <div><div><div>19</div></div> 161760 AND 161761.</div>				

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Figure 1. Material Index (Sheet 5)

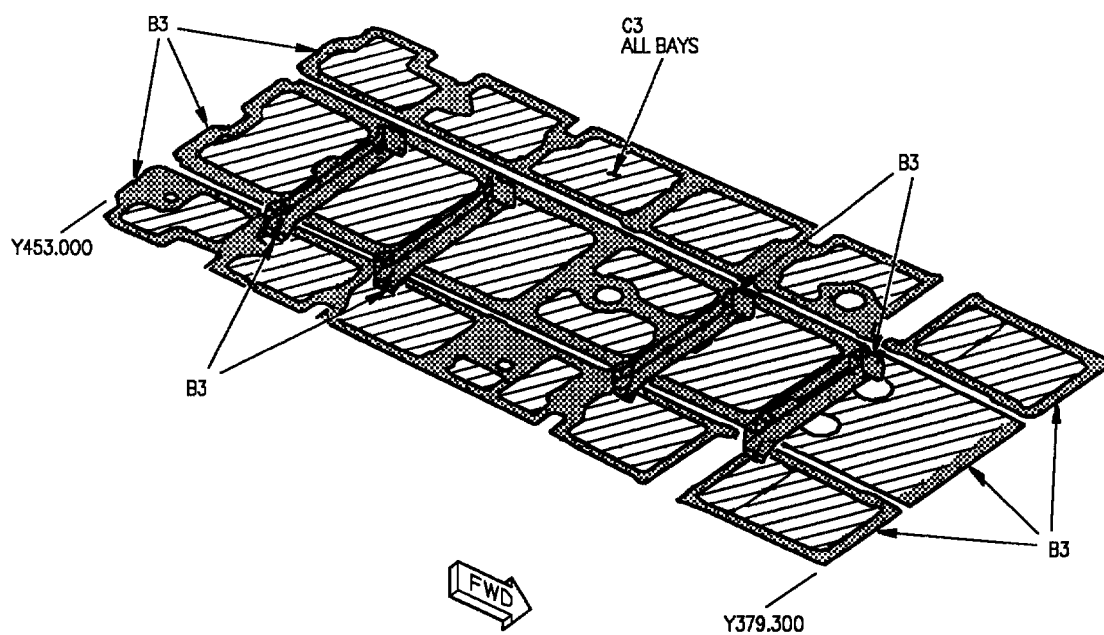


Figure 2. Repair Zones

ORGANIZATIONAL MAINTENANCE
STRUCTURE REPAIR
NUMBER 2 FUEL TANK BULKHEAD FOAM FILLERS

Reference Material

Fuel System A1-F18AC-460-300
No. 2 Fuel Tank Cavity Foam Filler WP021 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

None

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. DAMAGE EVALUATION. See figure 1.</p> <p>2. The figure identifies types of material used. Data shown can be used to analyze damage.</p> | <p>3. NEGLIGIBLE DAMAGE. Damage requires depot engineering disposition.</p> <p>4. REPAIRABLE DAMAGE. Damage requires depot engineering disposition.</p> <p>5. REPLACEMENT.</p> <p>6. For replacement of foam fillers (A1-F18AC-460-300, WP021 01).</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

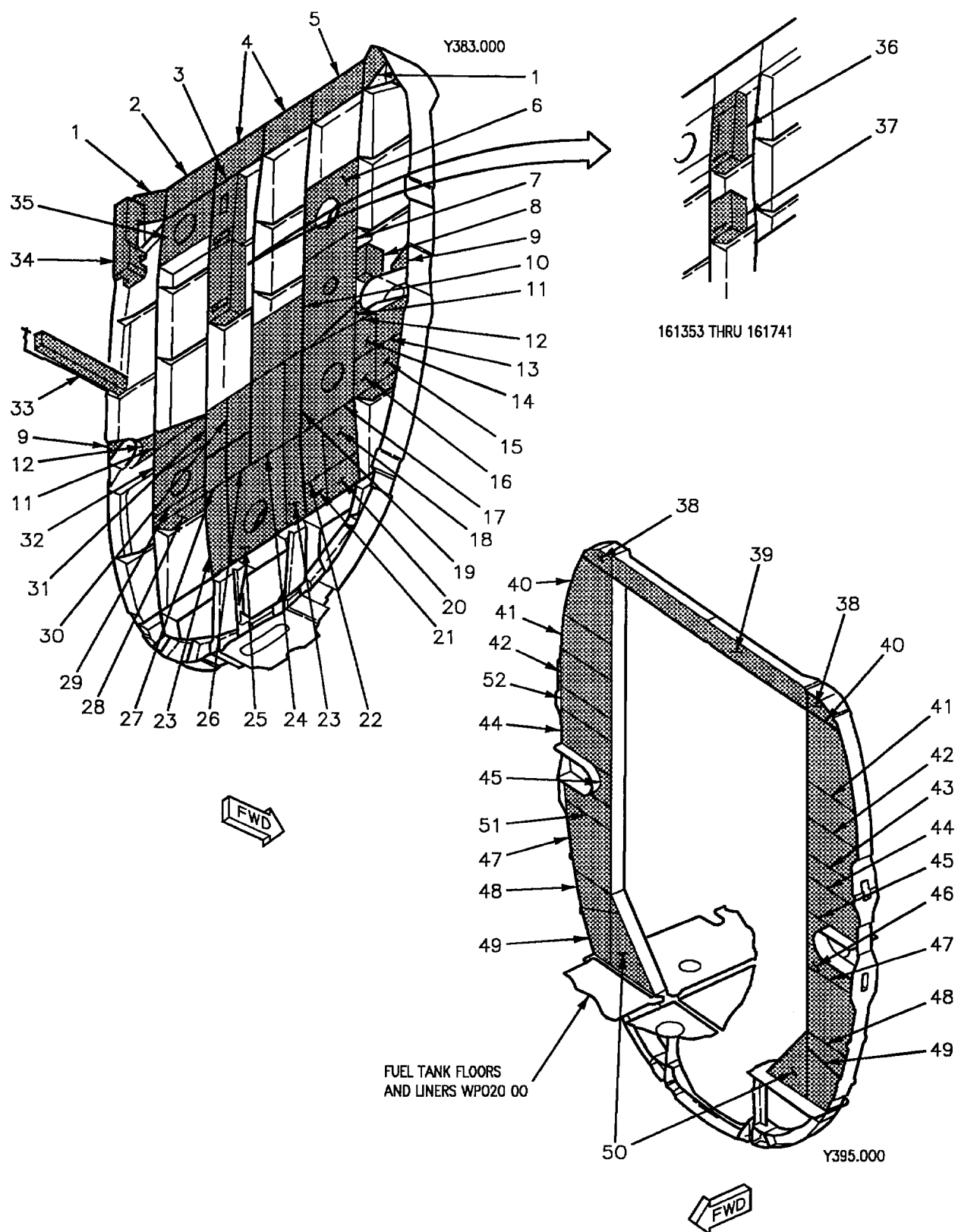


Figure 1. Material Index (Sheet 1)

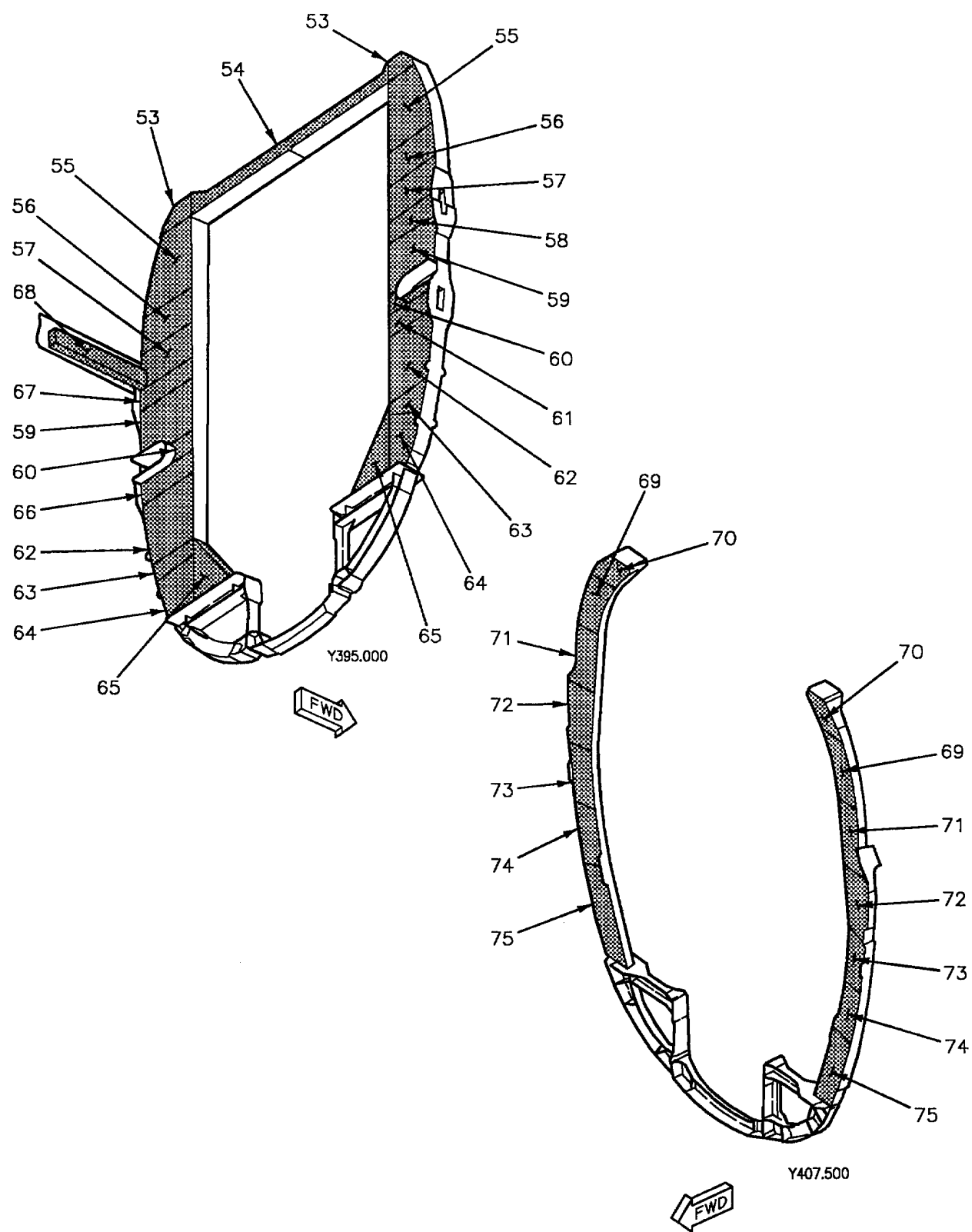


Figure 1. Material Index (Sheet 2)

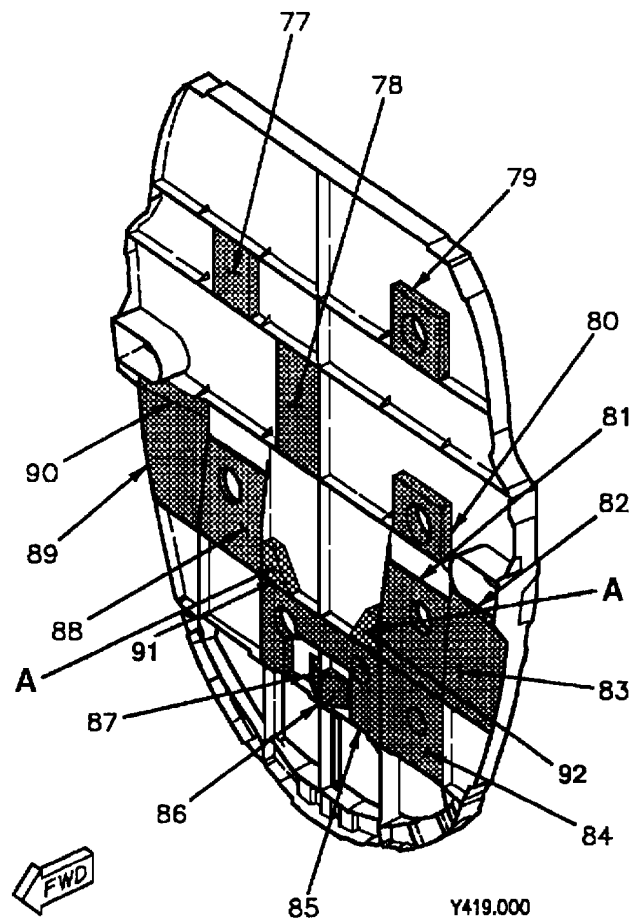
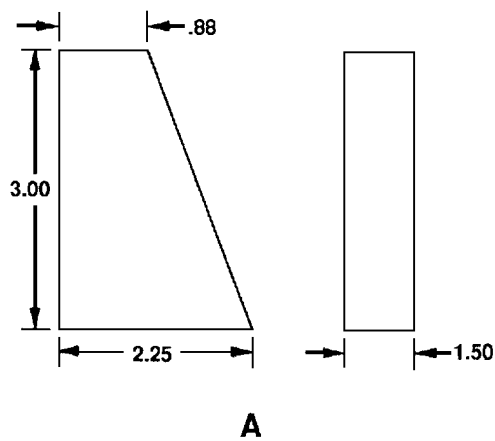
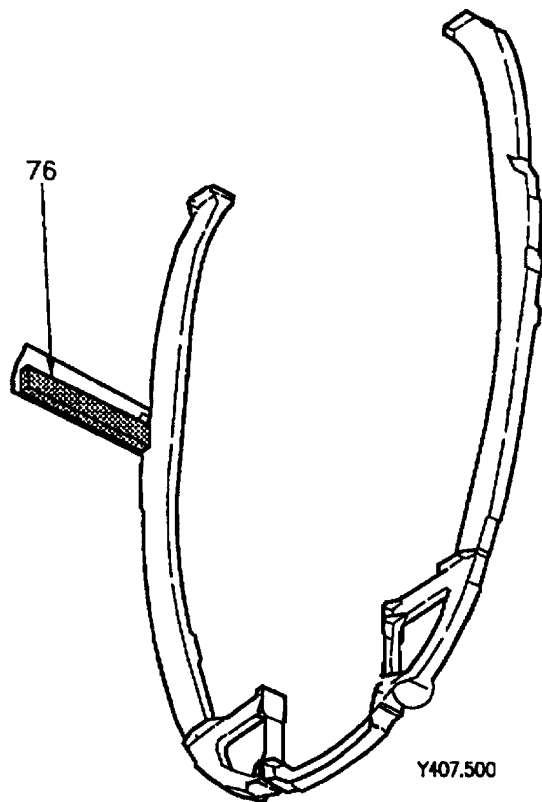


Figure 1. Material Index (Sheet 3)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2011 <div>4</div> 74A586200-2273	2.95 X 3.90 X 1.00 0.90 X 2.50 X 3.36	<div>1</div> <div>3</div>
2	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2001 74A586200-2275	3.35 X 8.15 X 1.00 0.90 X 6.65 X 3.00	<div>1</div> <div>3</div>
3	<div>7</div>	Filler (Foam) 74A586200-2281	1.90 X 3.18 X 16.42	<div>1</div> <div>3</div>
4	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2003 <div>4</div> 74A586200-2277	3.25 X 7.10 X 1.00 0.90 X 2.95 X 7.65	<div>1</div> <div>3</div>
5	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2009 74A586200-2275	3.40 X 8.25 X 1.00 0.90 X 6.65 X 3.00	<div>1</div> <div>3</div>
6	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2013 74A586200-2283	9.00 X 8.25 X 0.50 0.60 X 7.60 X 8.10	<div>1</div> <div>3</div>
7	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2015 74A586200-2287	10.10 X 8.35 X 1.00 0.60 X 9.60 X 7.30	<div>1</div> <div>3</div>
8	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2017 74A586200-2289	4.80 X 2.60 X 0.95 0.60 X 5.25 X 1.35	<div>1</div> <div>3</div>
9	<div>7</div>	Filler (Foam) <div>4</div> 74A586200-2425	1.50 X 2.00 X 2.50	<div>1</div> <div>3</div>
10	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2089 74A586200-2285	5.80 X 7.10 X 0.50 0.60 X 5.38 X 6.65	<div>1</div> <div>3</div>
11	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2021 <div>4</div> 74A586200-2293	7.20 X 3.50 X 2.00 1.90 X 2.80 X 6.40	<div>1</div> <div>3</div>
12	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2019 <div>4</div> 74A586200-2291	2.75 X 3.25 X 1.75 1.90 X 2.58 X 2.00	<div>1</div> <div>3</div>
13	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2227 74A586200-2313	0.80 X 4.20 X 4.10 0.65 X 3.90 X 3.95	<div>2</div> <div>3</div>
14	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2225 74A586200-2311	0.80 X 4.10 X 2.90 0.65 X 3.85 X 2.60	<div>2</div> <div>3</div>

Figure 1. Material Index (Sheet 4)
























































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16	 	Filler (Foam) 74A586200-2231 74A586200-2315	0.80 X 4.40 X 2.90 0.65 X 2.60 X 4.10	 
17	 	Filler (Foam) 74A586200-2023 74A586200-2309	10.30 X 8.05 X 2.00 1.90 X 7.60 X 9.80	 
18	 	Filler (Foam) 74A586200-2019 74A586200-2323	2.75 X 3.25 X 1.75 0.70 X 4.55 X 6.08	 
19	 	Filler (Foam) 74A586200-2025 74A586200-2307	10.75 X 7.10 X 1.20 1.40 X 2.42 X 9.88	 
20	 	Filler (Foam) 74A586200-2221 74A586200-2327	0.80 X 4.90 X 3.50 0.70 X 3.05 X 4.55	 
21	 	Filler (Foam) 74A586200-2223 74A586200-2325	0.80 X 3.50 X 2.87 0.70 X 2.76 X 3.05	 
22	 	Filler (Foam) 74A586200-2217 74A586200-2321	0.80 X 6.35 X 2.87 0.70 X 2.70 X 6.08	 
23		Filler (Foam)  74A586200-2029	10.10 X 3.00 X 1.50	 
24	 	Filler (Foam) 74A586200-2027 74A586200-2305	10.80 X 4.50 X 1.22 1.40 X 3.85 X 9.88	 
25	 	Filler (Foam) 74A586200-2057 74A586200-2319	9.90 X 8.80 X 1.38 1.90 X 9.40 X 13.75	 
26	 	Filler (Foam) 74A586200-2053 74A586200-2303	4.30 X 4.45 X 1.55 1.40 X 2.42 X 3.58	 
27	 	Filler (Foam) 74A586200-2051 74A586200-2301	4.15 X 2.80 X 1.20 1.40 X 3.86 X 5.95	 
28		Filler (Foam) 74A586200-2049	8.25 X 1.10 X 2.00	 

Figure 1. Material Index (Sheet 5)




























































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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30	 	Filler (Foam) 74A586200-2037 74A586200-2299	6.60 X 4.45 X 0.93 1.20 X 3.86 X 5.95	 
31	 	Filler (Foam) 74A586200-2039 74A586200-2297	6.60 X 3.00 X 1.00 1.20 X 2.42 X 5.95	 
32	 	Filler (Foam) 74A586200-2045 74A586200-2295	4.55 X 8.15 X 2.00 1.90 X 7.60 X 9.90	 
33	 	Filler (Foam)  74A586200-2169  74A586200-2409	1.75 X 9.25 X 0.86 0.75 X 1.50 X 10.50	 
34		Filler (Foam) 74A586200-2407	1.50 X 2.50 X 7.80	 
35	 	Filler (Foam) 74A586200-2033 74A586200-2279	6.35 X 8.35 X 1.00 0.90 X 5.86 X 6.12	 
36		Filler (Foam) 74A586200-2005	8.50 X 3.75 X 2.00	 
37		Filler (Foam) 74A586200-2035	4.00 X 3.80 X 2.00	 
38	 	Filler (Foam)  74A586200-2103  74A586200-2375	2.20 X 3.95 X 0.85 0.75 X 1.70 X 3.32	 
39	 	Filler (Foam) 74A586200-2155 74A586200-2355	2.65 X 30.55 X 0.88 0.75 X 7.10 X 16.65	 
40	 	Filler (Foam)  74A586200-2101  74A586200-2373	8.80 X 7.00 X 0.90 0.75 X 7.10 X 16.65	 
41		Filler (Foam)  74A586200-2099	4.45 X 7.20 X 0.90	 
42		Filler (Foam)  74A586200-2097	4.50 X 7.45 X 0.90	 

Figure 1. Material Index (Sheet 6)









































































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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44	 	Filler (Foam)  74A586200-2117  74A586200-2369	5.20 X 7.75 X 0.90 0.75 X 4.92 X 7.32	 
45	 	Filler (Foam)  74A586200-2099  74A586200-2367	3.85 X 2.85 X 0.80 0.75 X 2.30 X 3.04	 
46	 	Filler (Foam) 74A586200-2087 74A586200-2365	2.70 X 7.25 X 0.90 1.80 X 2.08 X 6.95	 
47	 	Filler (Foam)  74A586200-2085  74A586200-2363	8.45 X 7.35 X 0.90 0.75 X 6.75 X 7.80	 
48	 	Filler (Foam)  74A586200-2083  74A586200-2361	3.45 X 7.75 X 0.90 0.75 X 3.80 X 5.30	 
49	 	Filler (Foam)  74A586200-2081  74A586200-2359	5.95 X 11.50 X 0.90 0.75 X 4.25 X 5.88	 
50		Filler (Foam)  74A586200-2357	0.75 X 5.70 X 7.55	 
51	 	Filler (Foam) 74A586200-2123 74A586200-2366	2.65 X 6.95 X 1.62 1.80 X 2.08 X 6.95	 
52	 	Filler (Foam) 74A586200-2145 74A586200-2372	2.85 X 7.80 X 0.80 6.80 X 3.20 X 7.32	   
53	 	Filler (Foam)  74A586200-2103  74A586200-2331	2.20 X 3.95 X 0.85 0.80 X 6.70 X 3.35	   
54	 	Filler (Foam) 74A586200-2105 74A586200-2329	2.65 X 30.55 X 1.00 1.00 X 2.28 X 29.80	 
55	 	Filler (Foam)  74A586200-2101  74A586200-2333	8.80 X 7.00 X 0.90 0.80 X 5.98 X 5.22	   

Figure 1. Material Index (Sheet 7)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
56	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2099 <div>4</div> 74A586200-2335	4.45 X 7.20 X 0.90 0.80 X 5.48 X 6.80	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
57	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2097 <div>4</div> 74A586200-2337	4.50 X 7.45 X 0.90 0.80 X 5.35 X 7.06	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
58	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2095 74A586200-2340	2.85 X 7.95 X 3.75 1.52 X 2.20 X 7.30	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
59	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2117 <div>4</div> 74A586200-2341	5.25 X 7.75 X 0.90 0.80 X 4.95 X 7.08	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
60	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2091 <div>4</div> 74A586200-2343	3.85 X 2.85 X 0.80 0.80 X 2.34 X 3.07	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
61	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2087 74A586200-2346	2.70 X 7.25 X 0.90 1.52 X 2.06 X 6.95	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
62	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2085 <div>4</div> 74A586200-2347	8.45 X 7.35 X 0.90 0.80 X 6.66 X 7.84	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
63	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2083 <div>4</div> 74A586200-2349	3.45 X 7.75 X 0.90 0.80 X 4.34 X 5.30	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
64	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2081 <div>4</div> 74A586200-2351	5.95 X 11.50 X 0.90 0.80 X 4.06 X 5.34	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
65	<div>7</div>	Filler (Foam) <div>4</div> 74A586200-2353	0.80 X 5.82 X 7.55	<div>1</div> <div>3</div>
66	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2123 74A586200-2345	2.65 X 6.95 X 1.62 1.52 X 2.06 X 6.95	<div>1</div> <div>3</div> <div>1</div> <div>3</div>
67	<div>6</div> <div>7</div>	Filler (Foam) 74A586200-2095 74A586200-2339	2.85 X 7.80 X 0.80 1.52 X 2.20 X 7.30	<div>1</div> <div>3</div>
68	<div>6</div> <div>7</div>	Filler (Foam) <div>4</div> 74A586200-2121 <div>4</div> 74A586200-2411	2.50 X 11.00 X 0.86 0.88 X 1.75 X 10.25	<div>1</div> <div>3</div>

Figure 1. Material Index (Sheet 8)






































































Idx No.	Eft	Nomenclature and Part No.	Description	Material
69	 	Filler (Foam)  74A586200-2197  74A586200-2387	7.35 X 4.45 X 0.85 0.65 X 4.12 X 8.30	 
70	 	Filler (Foam)  74A586200-2181  74A586200-2389	3.85 X 6.55 X 0.75 0.75 X 3.05 X 4.02	 
71	 	Filler (Foam)  74A586200-2199  74A586200-2385	7.75 X 4.15 X 0.85 0.65 X 3.34 X 7.05	 
72	 	Filler (Foam)  74A586200-2201  74A586200-2383	7.45 X 3.70 X 0.85 0.65 X 3.00 X 7.00	 
73	 	Filler (Foam)  74A586200-2203  74A586200-2381	3.50 X 3.15 X 0.85 0.65 X 2.15 X 6.53	 
74	 	Filler (Foam)  74A586200-2205  74A586200-2379	7.35 X 3.45 X 0.85 0.65 X 2.15 X 6.72	 
75	 	Filler (Foam)  74A586200-2207  74A586200-2377	10.35 X 5.00 X 0.85 0.65 X 2.34 X 9.90	 
76	 	Filler (Foam)  74A586200-2139  74A586200-2412	2.25 X 11.70 X 0.86 0.88 X 1.50 X 10.25	 
77	 	Filler (Foam) 74A586200-2073 74A586200-2405	6.65 X 4.85 X 1.00 1.00 X 5.00 X 5.82	 
78	 	Filler (Foam) 74A586200-2075 74A586200-2401	10.05 X 4.15 X 1.00 1.00 X 2.32 X 9.54	 
79	 	Filler (Foam) 74A586200-2059 74A586200-2403	6.35 X 5.75 X 1.00 1.00 X 5.59 X 5.60	 
80	  	Filler (Foam) 74A586200-2061 74A586200-2399 74A586200-9005	5.85 X 5.85 X 1.00 1.00 X 4.42 X 5.50 1.00 X 1.00 X 5.50	 
81	 	Filler (Foam) 74A586200-2063 74A586200-2397	8.45 X 7.15 X 1.00 1.00 X 6.66 X 8.40	 

Figure 1. Material Index (Sheet 9)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
82	<input type="text" value="6"/>	Filler (Foam) 74A586200-2245	1.00 X 1.60 X 7.80	<input type="text" value="2"/> <input type="text" value="3"/>
83	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2065 74A586200-2395	10.90 X 8.10 X 1.00 1.00 X 7.47 X 11.92	<input type="text" value="1"/> <input type="text" value="3"/>
84	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2067 74A586200-2391	8.20 X 7.35 X 1.00 1.00 X 6.65 X 7.48	<input type="text" value="1"/> <input type="text" value="3"/>
85	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2069 74A586200-2393	8.45 X 14.25 X 1.00 1.00 X 7.48 X 13.77	<input type="text" value="1"/> <input type="text" value="3"/>
86	<input type="text" value="7"/>	Filler (Foam) 74A586200-2431	1.25 X 1.50 X 0.80	<input type="text" value="1"/> <input type="text" value="3"/>
87	<input type="text" value="7"/>	Filler (Foam) 74A586200-2432	1.25 X 1.50 X 0.80	<input type="text" value="1"/> <input type="text" value="3"/>
88	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2063 74A586200-2398	8.45 X 7.15 X 1.00 8.38 X 6.25 X 1.00	<input type="text" value="1"/> <input type="text" value="3"/>
89	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2079 74A586200-2396	11.25 X 8.05 X 1.00 1.00 X 7.47 X 11.92	<input type="text" value="1"/> <input type="text" value="3"/>
90	<input type="text" value="6"/>	Filler (Foam) 74A586200-2243	1.00 X 1.60 X 7.80	<input type="text" value="2"/> <input type="text" value="3"/>
91	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2491	1.5 X 2.25 X 3.00	<input type="text" value="1"/> <input type="text" value="3"/>
92	<input type="text" value="6"/> <input type="text" value="7"/>	Filler (Foam) 74A586200-2492	1.5 X 2.25 X 3.00	<input type="text" value="1"/> <input type="text" value="3"/>
<p style="text-align: center;">LEGEND</p> <p><input type="text" value="1"/> Make from PPP-C-1752, type 1, 2 pounds per cu. ft., class III.</p> <p><input type="text" value="2"/> Make from HH-I-530, type 1, 2 pounds per cu. ft., class I, grade 2.</p> <p><input type="text" value="3"/> Bond foam using EC-847 adhesive - 3M Company, St. Paul, Minn. 04963.</p> <p><input type="text" value="4"/> Two places.</p> <p><input type="text" value="5"/> 161951 AND UP.</p> <p><input type="text" value="6"/> 161353 THRU 161741.</p> <p><input type="text" value="7"/> 161742 AND UP.</p> <p><input type="text" value="8"/> 161742 THRU 161950.</p>				

Figure 1. Material Index (Sheet 10)

ORGANIZATIONAL MAINTENANCE
STRUCTURE REPAIR
NUMBER 3 FUEL TANK BULKHEAD FOAM FILLERS

Reference Material

Fuel System A1-F18AC-460-300
No. 3 Fuel Tank Cavity Foam Filler WP025 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.

1. **DAMAGE EVALUATION.** See figure 1.

5. **REPLACEMENT.**

2. The figure identifies types of material used. Data shown can be used to analyze damage.

6. For replacement of foam fillers (A1-F18AC-460-300, WP025 01).

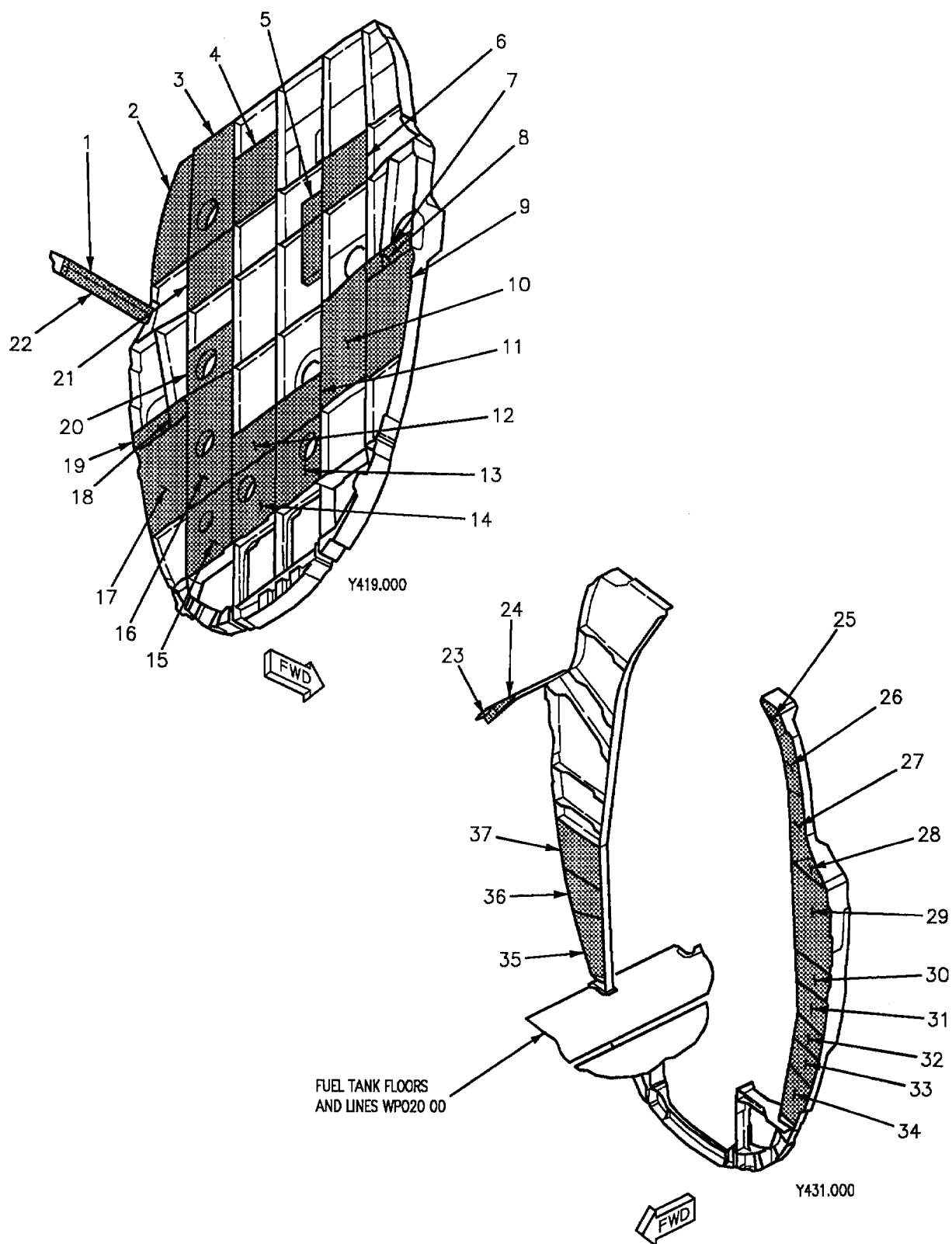


Figure 1. Material Index (Sheet 1)

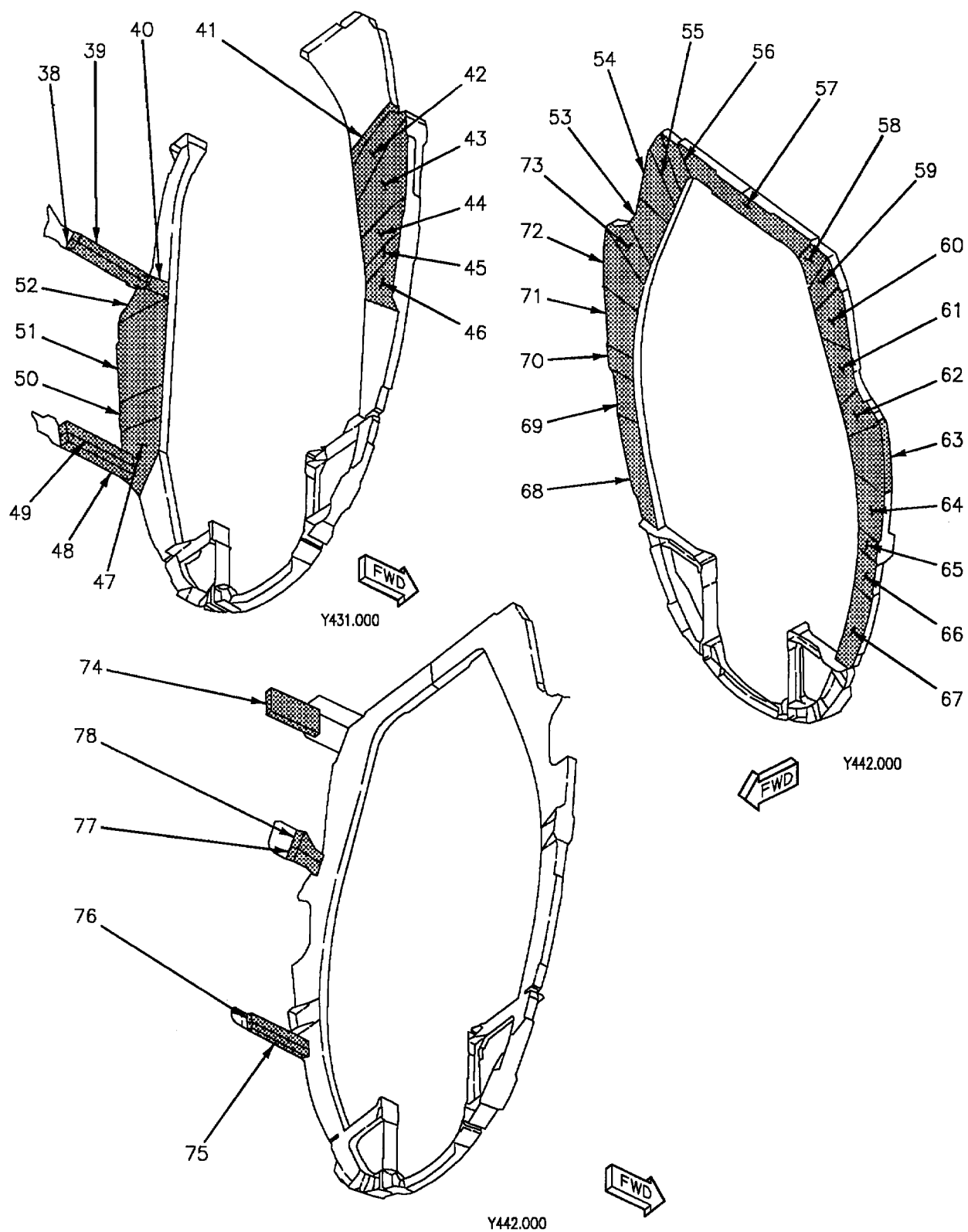


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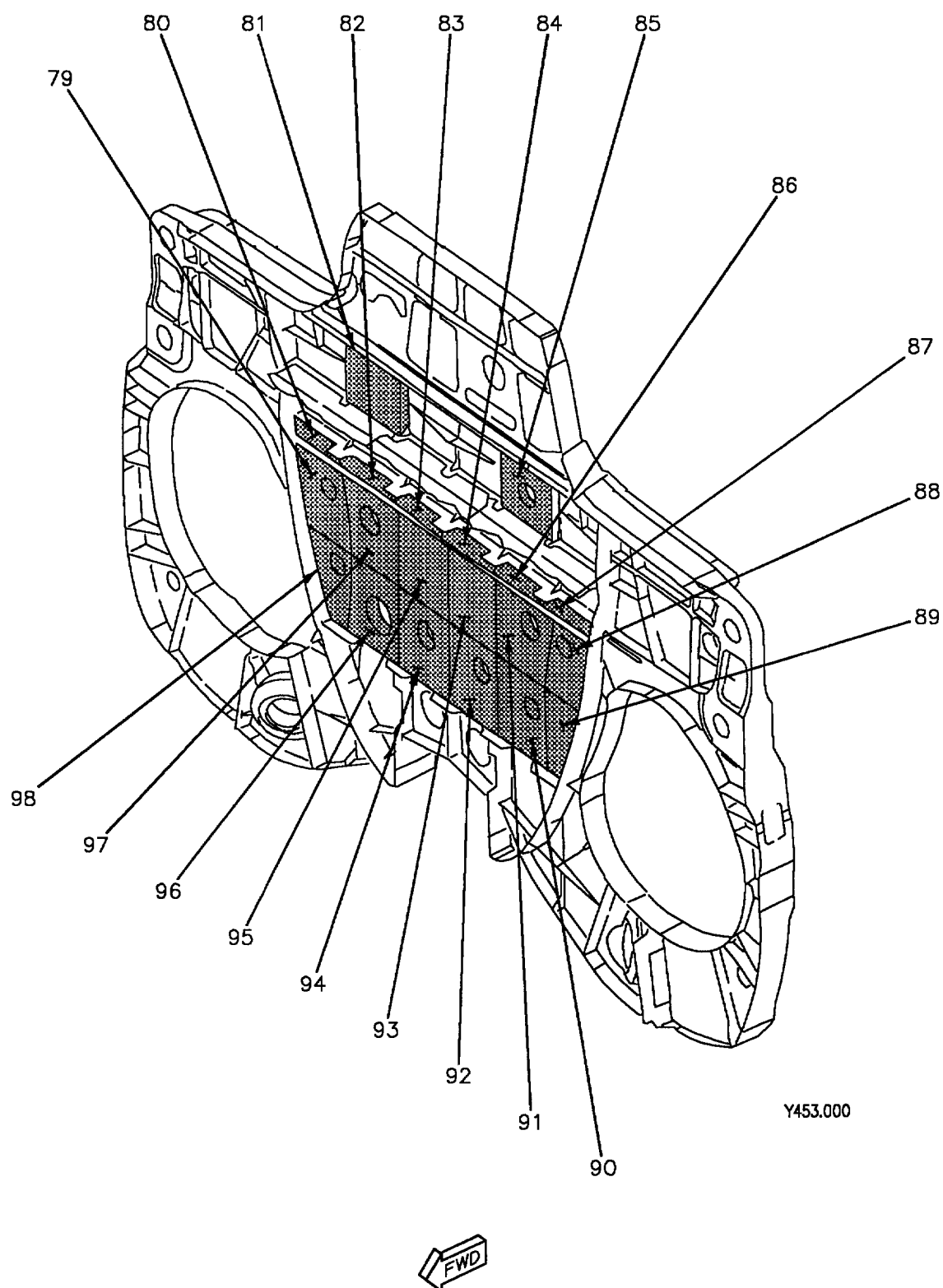


Figure 1. Material Index (Sheet 3)





















































Idx No.	Eft	Nomenclature and Part No.	Description	Material
1	 	Filler (Foam) 74A586300-2141 74A586300-2341	1.25 X 1.25 X 6.63	 
2	 	Filler (Foam) 74A586300-2017 74A586300-2371	1.00 X 5.25 X 10.75	 
3	 	Filler (Foam) 74A586300-2015 74A586300-2373	1.00 X 6.88 X 11.25	 
4	 	Filler (Foam) 74A586300-2013 74A586300-2367	1.00 X 7.00 X 7.75	 
5	 	Filler (Foam) 74A586300-2003 74A586300-2361	1.00 X 4.00 X 8.25	 
6	 	Filler (Foam) 74A586300-2001 74A586300-2353	1.00 X 6.13 X 7.00	 
7	 	Filler (Foam) 74A586300-2191 74A586300-2355	1.00 X 1.75 X 5.00	 
8	 	Filler (Foam) 74A586300-2197 74A586300-2349	1.00 X 1.75 X 3.00	 
9	 	Filler (Foam) 74A586300-2007 74A586300-2357	1.00 X 7.38 X 10.50	 
10	 	Filler (Foam) 74A586300-2005 74A586300-2359	1.00 X 6.88 X 12.25	 
11	 	Filler (Foam) 74A586300-2027 74A586300-2381	1.00 X 3.63 X 7.00	 
12	 	Filler (Foam) 74A586300-2039 74A586300-2381	1.00 X 3.63 X 7.00	 
13	 	Filler (Foam) 74A586300-2009 74A586300-2362	1.00 X 7.00 X 7.75	 

Figure 1. Material Index (Sheet 4)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
14	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2011 74A586300-2365	1.00 X 7.00 X 7.75	<div>1</div> <div>2</div>
15	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2025 74A586300-2379	1.00 X 7.00 X 7.75	<div>1</div> <div>2</div>
16	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2021 74A586300-2360	1.00 X 6.88 X 12.25	<div>1</div> <div>2</div>
17	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2023 74A586300-2377	1.00 X 7.88 X 10.50	<div>1</div> <div>2</div>
18	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2195 74A586300-2349	1.00 X 1.75 X 3.00	<div>1</div> <div>2</div>
19	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2193 74A586300-2355	1.00 X 1.75 X 5.00	<div>1</div> <div>2</div>
20	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2019 74A586300-2369	1.00 X 5.38 X 6.88	<div>1</div> <div>2</div>
21	<div>3</div>	Filler (Foam) 74A586300-2187		<div>1</div> <div>2</div>
22	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2143 74A586300-2345	2.50 X 3.38 X 10.25	<div>1</div> <div>2</div>
23	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2163 74A586300-2347	1.75 X 2.63 X 4.63	<div>1</div> <div>2</div>
24		Filler (Foam) 74A586300-2161		<div>1</div> <div>2</div>
25	<div>5</div>	Filler (Foam) 74A586300-2431	0.90 X 3.50 X 3.50	<div>1</div> <div>2</div>
26	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2091 74A586300-2429	0.90 X 3.00 X 6.00	<div>1</div> <div>2</div>
27		Filler (Foam) 74A586300-2089		<div>1</div> <div>2</div>

Figure 1. Material Index (Sheet 5)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
28		Filler (Foam) 74A586300-2087		<input type="text" value="1"/> <input type="text" value="2"/>
29		Filler (Foam) <input type="text" value="4"/> 74A586300-2085		<input type="text" value="1"/> <input type="text" value="2"/>
30		Filler (Foam) 74A586300-2083		<input type="text" value="1"/> <input type="text" value="2"/>
31		Filler (Foam) 74A586300-2081		<input type="text" value="1"/> <input type="text" value="2"/>
32	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2079 74A586300-2427	0.90 X 3.25 X 3.50	<input type="text" value="1"/> <input type="text" value="2"/>
33	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2077 74A586300-2425	0.90 X 3.50 X 6.00	<input type="text" value="1"/> <input type="text" value="2"/>
34	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2075 74A586300-2423	0.90 X 3.00 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
35	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2097 74A586300-2433	0.90 X 5.00 X 7.50	<input type="text" value="1"/> <input type="text" value="2"/>
36	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2095 74A586300-2435	0.90 X 4.50 X 5.50	<input type="text" value="1"/> <input type="text" value="2"/>
37	<input type="text" value="4"/> <input type="text" value="5"/>	Filler (Foam) 74A586300-2093 74A586300-2437	0.90 X 5.50 X 6.50	<input type="text" value="1"/> <input type="text" value="2"/>
38		Filler (Foam) <input type="text" value="6"/> 74A586300-2151		<input type="text" value="1"/> <input type="text" value="2"/>
39		Filler (Foam) <input type="text" value="6"/> 74A586300-2149		<input type="text" value="1"/> <input type="text" value="2"/>
40		Filler (Foam) 74A586300-2065		<input type="text" value="1"/> <input type="text" value="2"/>
41		Filler (Foam) 74A586300-2063		<input type="text" value="1"/> <input type="text" value="2"/>
42		Filler (Foam) 74A586300-2061		<input type="text" value="1"/> <input type="text" value="2"/>
43		Filler (Foam) 74A586300-2059		<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 6)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
44		Filler (Foam) 74A586300-2057		<input type="checkbox"/> 1 <input type="checkbox"/> 2
45		Filler (Foam) 74A586300-2055		<input type="checkbox"/> 1 <input type="checkbox"/> 2
46		Filler (Foam) 74A586300-2053		<input type="checkbox"/> 1 <input type="checkbox"/> 2
47		Filler (Foam) 74A586300-2073		<input type="checkbox"/> 1 <input type="checkbox"/> 2
48	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) <input type="checkbox"/> 6 74A586300-2147 <input type="checkbox"/> 6 74A586300-2337	1.00 X 1.75 X 5.88	<input type="checkbox"/> 1 <input type="checkbox"/> 2
49	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) <input type="checkbox"/> 6 74A586300-2145 <input type="checkbox"/> 6 74A586300-2337	1.00 X 1.75 X 5.88	<input type="checkbox"/> 1 <input type="checkbox"/> 2
50		Filler (Foam) 74A586300-2071		<input type="checkbox"/> 1 <input type="checkbox"/> 2
51		Filler (Foam) 74A586300-2069		<input type="checkbox"/> 1 <input type="checkbox"/> 2
52		Filler (Foam) 74A586300-2067		<input type="checkbox"/> 1 <input type="checkbox"/> 2
53		Filler (Foam) 74A586300-2127		<input type="checkbox"/> 1 <input type="checkbox"/> 2
54	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) 74A586300-2125 74A586300-2415	0.68 X 4.25 X 5.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
55	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) 74A586300-2123 74A586300-2417	0.68 X 6.00 X 6.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
56	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) 74A586300-2121 74A586300-2419	0.80 X 3.00 X 7.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
57	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) 74A586300-2119 74A586300-2421	0.68 X 2.50 X 17.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
58	<input type="checkbox"/> 4 <input type="checkbox"/> 5	Filler (Foam) 74A586300-2099 74A586300-2420	0.80 X 3.00 X 7.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 7)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
59	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2101 74A586300-2417	0.68 X 6.00 X 6.00	<div>1</div> <div>2</div>
60	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2103 74A586300-2415	0.68 X 4.25 X 5.00	<div>1</div> <div>2</div>
61		Filler (Foam) 74A586300-2105		<div>1</div> <div>2</div>
62		Filler (Foam) 74A586300-2107		<div>1</div> <div>2</div>
63		Filler (Foam) 74A586300-2109		<div>1</div> <div>2</div>
64		Filler (Foam) 74A586300-2111		<div>1</div> <div>2</div>
65		Filler (Foam) 74A586300-2113		<div>1</div> <div>2</div>
66		Filler (Foam) 74A586300-2115		<div>1</div> <div>2</div>
67	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2117 74A586300-2312	1.00 X 2.50 X 10.63	<div>1</div> <div>2</div>
68	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2139 74A586300-2311	1.00 X 2.50 X 10.63	<div>1</div> <div>2</div>
69		Filler (Foam) 74A586300-2137		<div>1</div> <div>2</div>
70		Filler (Foam) 74A586300-2135		<div>1</div> <div>2</div>
71		Filler (Foam) 74A586300-2133		<div>1</div> <div>2</div>
72		Filler (Foam) 74A586300-2131		<div>1</div> <div>2</div>
73		Filler (Foam) 74A586300-2129		<div>1</div> <div>2</div>
74	<div>7</div> <div>8</div>	Filler (Foam) <div>6</div> 74A586300-2441 <div>6</div> 74A586300-2443	0.75 X 2.50 X 6.25	<div>1</div> <div>2</div>

Figure 1. Material Index (Sheet 8)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
75		Filler (Foam) 6 74A586300-2159		1 2
76		Filler (Foam) 6 74A586300-2157		1 2
77	4 5	Filler (Foam) 6 74A586300-2155 6 74A586300-2343	1.00 X 1.88 X 5.25	1 2
78	4 5	Filler (Foam) 6 74A586300-2153 6 74A586300-2343	1.00 X 1.88 X 5.25	1 2
79	4 5	Filler (Foam) 74A586300-2045 74A586300-2395	1.00 X 6.38 X 8.12	1 2
80	4 5	Filler (Foam) 74A586300-2185 74A586300-2403	1.25 X 2.13 X 6.75	1 2
81	4 5	Filler (Foam) 74A586300-2041 74A586300-2411	1.00 X 6.88 X 7.75	1 2
82	4 5	Filler (Foam) 74A586300-2181 74A586300-2405	1.25 X 2.25 X 7.75	1 2
83	4 5	Filler (Foam) 74A586300-2179 74A586300-2407	1.25 X 2.62 X 7.25	1 2
84	4 5	Filler (Foam) 74A586300-2171 74A586300-2407	1.25 X 2.62 X 7.75	1 2
85	4 5	Filler (Foam) 74A586300-2029 74A586300-2409	1.00 X 6.75 X 8.00	1 2
86	4 5	Filler (Foam) 74A586300-2173 74A586300-2405	1.25 X 2.25 X 7.75	1 2
87	4 5	Filler (Foam) 74A586300-2177 74A586300-2403	1.25 X 2.13 X 6.75	1 2
88	4 5	Filler (Foam) 74A586300-2033 74A586300-2397	1.00 X 6.25 X 8.00	1 2

Figure 1. Material Index (Sheet 9)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
89	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2189 75A586300-2399	1.00 X 5.25 X 8.38	<div>1</div> <div>2</div>
90	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2035 74A586300-2383	1.00 X 6.75 X 8.00	<div>1</div> <div>2</div>
91	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2031 74A586300-2385	1.25 X 7.38 X 8.00	<div>1</div> <div>2</div>
92	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2037 74A586300-2387	1.25 X 7.25 X 8.25	<div>1</div> <div>2</div>
93	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2175 74A586300-2393	1.25 X 7.00 X 8.25	<div>1</div> <div>2</div>
94	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2051 74A586300-2391	1.25 X 7.00 X 8.00	<div>1</div> <div>2</div>
95	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2183 74A586300-2393	1.25 X 7.00 X 8.25	<div>1</div> <div>2</div>
96	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2047 74A586300-2389	1.25 X 6.62 X 8.25	<div>1</div> <div>2</div>
97	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2043 74A586300-2386	1.25 X 7.38 X 8.00	<div>1</div> <div>2</div>
98	<div>4</div> <div>5</div>	Filler (Foam) 74A586300-2049 74A586300-2401	1.00 X 5.25 X 8.50	<div>1</div> <div>2</div>
<p style="text-align: center;">LEGEND</p> <div> <div>1</div> Make from PPP-C-1752, Type I, 2 pounds per cu. ft., Class III. <div>2</div> Bond foam using EC-847 adhesive - 3M Company, St. Paul, Minn. 04963. <div>3</div> 161353 THRU 161525, 161528, 161702. <div>4</div> 161353 THRU 161741. <div>5</div> 161742 AND UP. <div>6</div> Two required. <div>7</div> 161742 THRU 161944. <div>8</div> 161945 AND UP. </div>				

Figure 1. Material Index (Sheet 10)

ORGANIZATIONAL MAINTENANCE
STRUCTURE REPAIR
NUMBER 4 FUEL TANK FLOOR AND WEBS
EFFECTIVITY: 161353 THRU 161741

Reference Material

Fuel System	A1-F18AC-460-300
Fuel Tank Cavity Preparation	WP039 00
Structure Repair, General Information	A1-F18AC-SRM-200
Introduction	WP002 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Blending	WP038 00
Aircraft Weapons System Cleaning and Corrosion Control	NAVAIR 01-1A-509

Alphabetical Index

Subject	Page No
Damage Evaluation	1
Negligible Damage	2
Repairable Damage	2
Repairs	2

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Types of materials used are shown on figure 1. Repair zones are shown on figure 2. Allowable damage limits within repair zones are listed in tables 1 and 2. Damage not listed or

exceeding following limits require depot engineering disposition.

3. NEGLIGIBLE DAMAGE. Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches (NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

a. Scratches are not allowed within one diameter from edge of any hole.

b. Smooth dents only, effective diameter at least 20 times depth.

4. REPAIRABLE DAMAGE. Types and limits of damage are listed below and in table 2. Figure and index numbers in table 2 coincide with figure and index numbers in material index.

NOTE

Limits in table 2 apply after blending the damage.

a. Scratches.

(1) Any scratches within one diameter of any hole must be blended out. Minimum blend out is one diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.



Make sure all sharp edges have been removed from fuel tank cavities after repair (A1-F18AC-460-300, WP039 00). Damage to fuel tank can be caused by sharp edges.

5. REPAIRS.

6. Types of repairs are temporary, one-time flight, permanent, critical area, alternate, and typical. Repair type definitions are in structure repair terms (A1-F18AC-SRM-200, WP002 00). Blend scratches, nicks, gouges or corrosion (A1-F18AC-SRM-250, WP038 00). If, after blending, damage limits of table 2 are exceeded, depot engineering disposition is required. Other repairs require depot engineering disposition. Refinish blended areas (NAVAIR 01-1A-509).

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (1)	Stiffener Zone B4	0.090	0.0006	0.0006	100%	0.045	5%
Fig 1 (2)	Stiffener Zone B4	0.090	0.0006	0.0006	100%	0.045	5%
Fig 1 (3)	Web Zone B4 Zone C4	0.090	0.0006	0.0006	100%	0.045	5%
		0.040	0.0006	0.0006	100%	0.020	NA
Fig 1 (4)	Stiffener Zone B4	0.090	0.0006	0.0006	100%	0.045	5%

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (5)	Stringer Zone B4	0.063	0.0006	0.0006	100%	0.032	5%
Fig 1 (6)	Web Zone B4 Zone C4	0.050	0.0006	0.0006	100%	0.025	5%
		0.030	0.0006	0.0006	100%	0.015	NA
Fig 1 (7)	Web Zone B4 Zone C4	0.050	0.0006	0.0006	100%	0.025	5%
		0.030	0.0006	0.0006	100%	0.015	NA
Fig 1 (8)	Web Zone B4 Zone C4	0.050	0.0006	0.0006	100%	0.025	5%
		0.030	0.0006	0.0006	100%	0.015	NA
Fig 1 (9)	Web Zone B4 Zone C4	0.100	0.0006	0.0006	100%	0.050	5%
		0.060	0.0006	0.0006	100%	0.030	NA
Fig 1 (10)	Web Zone B4 Zone C4	0.100	0.0006	0.0006	100%	0.050	5%
		0.060	0.0006	0.0006	100%	0.030	NA
Fig 1 (11)	Web Zone B4	0.125	0.0006	0.0006	100%	0.063	5%
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
	Zone B4	0.160	0.0006	0.0006	100%	0.080	5%
	Zone B4	0.110	0.0006	0.0006	100%	0.055	5%
Fig 1 (12)	Web Zone B4	0.125	0.0006	0.0006	100%	0.063	5%
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
	Zone B4	0.110	0.0006	0.0006	100%	0.055	5%
	Zone B4	0.160	0.0006	0.0006	100%	0.080	5%
Fig 1 (13)	Web Zone B4	0.125	0.0006	0.0006	100%	0.125	5%
	Zone B4	0.150	0.0006	0.0006	100%	0.075	5%
	Zone C4	0.080	0.0006	0.0006	100%	0.040	NA
	Zone B4	0.280	0.0006	0.0006	100%	0.140	5%
Fig 1(14)	Web Zone B4	0.125	0.0006	0.0006	100%	0.063	NA
	Zone C4	0.080	0.0006	0.0006	100%	0.040	NA
	Zone B4	0.110	0.0006	0.0006	100%	0.055	5%
	Zone B4	0.280	0.0006	0.0006	100%	0.140	5%
Fig 1 (15)	Floor Zone B4 Zone C4	0.050	0.0006	0.0006	100%	0.025	5%
		0.025	0.0006	0.0006	100%	0.013	NA

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (16)	Floor Zone C4	0.080	0.0006	0.0006	100%	0.040	5%
Fig 1 (17)	Floor Zone C4	0.080	0.0006	0.0006	100%	0.040	5%
Fig 1 (18)	Support Zone C4	0.080	0.0006	0.0006	100%	0.040	5%
Fig 1 (20)	Support Zone C4	0.100	0.0006	0.0006	100%	0.050	5%
	Zone B4	0.080	0.0006	0.0006	100%	0.040	5%
	Zone B4	0.171	0.0006	0.0006	100%	0.086	5%
Fig 1 (21)	Plate Zone B4	0.120	0.0006	0.0006	100%	0.060	5%
	Zone B4	0.191	0.0006	0.0006	100%	0.096	5%
	Zone C4	0.070	0.0006	0.0006	100%	0.035	5%
	Zone C4	0.090	0.0006	0.0006	100%	0.045	5%
Fig 1 (22)	Support Zone B4	0.291	0.0006	0.0006	100%	0.146	5%
	Zone B4	0.261	0.0006	0.0006	100%	0.136	5%
	Zone B4	0.080	0.0006	0.0006	100%	0.040	5%
	Zone B4	0.150	0.0006	0.0006	100%	0.075	5%
	Zone B4	0.200	0.0006	0.0006	100%	0.100	5%
Fig 1 (23)	Floor Zone B4	0.071	0.0006	0.0006	100%	0.036	5%
	Zone C4	0.032	0.0006	0.0006	100%	0.016	NA
	Zone C4	0.040	0.0006	0.0006	100%	0.020	NA
Fig 1 (24)	Floor Zone B4	0.090	0.0006	0.0006	100%	0.045	5%
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
Fig 1 (25)	Floor Zone B4	0.110	0.0006	0.0006	100%	0.055	5%
	Zone C4	0.090	0.0006	0.0006	100%	0.045	NA
Fig 1 (26)	Floor Zone B4	0.110	0.0006	0.0006	100%	0.055	5%
	Zone C4	0.090	0.0006	0.0006	100%	0.045	NA
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
	Zone B4	0.070	0.0006	0.0006	100%	0.035	NA
Fig 1 (27)	Stiffener Zone B4	0.063	0.0006	0.0006	100%	0.032	15%
Fig 1 (28)	Channel Zone B4	0.063	0.0006	0.0006	100%	0.032	15%

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (29)	Angle Zone B4	0.050	0.0006	0.0006	100%	0.025	15%
Fig 1 (30)	Angle Zone B4	0.050	0.0006	0.0006	100%	0.025	15%
Fig 1 (31)	Channel Zone B4	0.050	0.0006	0.0006	100%	0.025	15%

Table 2. Repairable Damage Limits After Blending

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (1)	Stiffener Zone B4	0.090	0.018	0.018	20%	0.018	20%
Fig 1 (2)	Stiffener Zone B4	0.090	0.018	0.018	20%	0.018	20%
Fig 1 (3)	Web Zone B4 Zone C4	0.090	0.018	0.018	10%	0.018	10%
		0.040	0.008	0.008	10%	0.008	10%
Fig 1 (4)	Stiffener Zone B4	0.090	0.018	0.018	20%	0.018	20%
Fig 1 (5)	Stringer Zone B4	0.063	0.012	0.012	20%	0.012	20%
Fig 1 (6)	Web Zone B4 Zone C4	0.050	0.010	0.010	10%	0.010	10%
		0.030	0.006	0.006	10%	0.006	10%
Fig 1 (7)	Web Zone B4 Zone C4	0.050	0.010	0.010	10%	0.010	10%
		0.030	0.006	0.006	10%	0.006	10%
Fig 1 (8)	Web Zone B4 Zone C4	0.050	0.010	0.010	10%	0.010	10%
		0.030	0.006	0.006	10%	0.006	10%
Fig 1 (9)	Web Zone B4 Zone C4	0.100	0.020	0.020	10%	0.020	10%
		0.060	0.012	0.012	10%	0.012	10%

Table 2. Repairable Damage Limits After Blending (Continued)





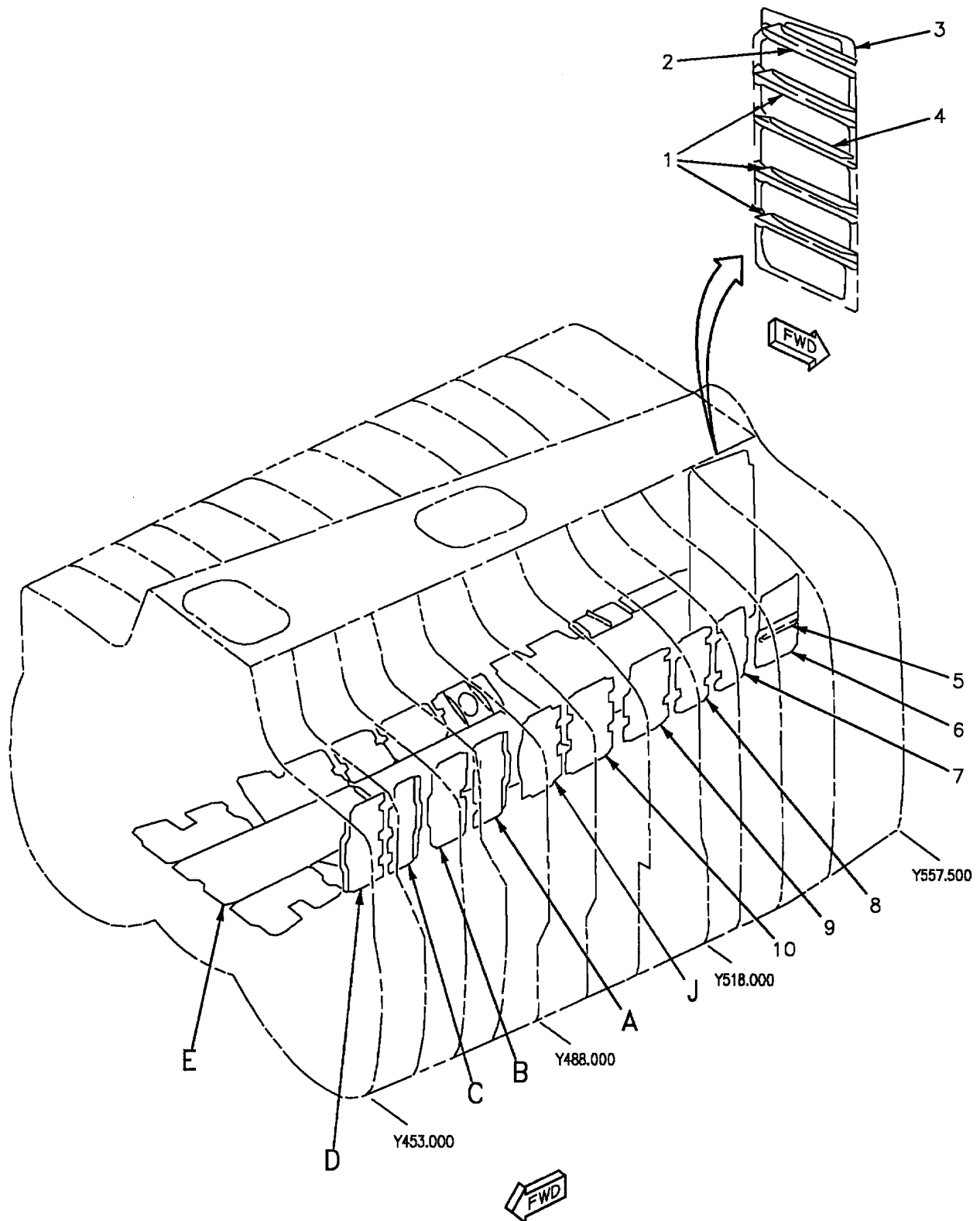
Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (10)	Web	0.100	0.020	0.020	10%	0.020	10%
	Zone B4 Zone C4	0.060	0.012	0.012	10%	0.012	10%
Fig 1 (11)	Web	0.125	0.025	0.025	10%	0.025	10%
	Zone B4	0.060	0.012	0.012	10%	0.012	10%
	Zone C4	0.110	0.022	0.022	10%	0.022	10%
	Zone B4	0.160	0.032	0.032	10%	0.032	10%
Fig 1 (12)	Web	0.125	0.025	0.025	10%	0.025	10%
	Zone B4	0.060	0.012	0.012	10%	0.012	10%
	Zone C4	0.110	0.022	0.022	10%	0.022	10%
	Zone B4	0.160	0.032	0.032	10%	0.032	10%
Fig 1 (13)	Web	0.125	0.025	0.025	10%	0.025	10%
	Zone B4	0.150	0.030	0.030	10%	0.030	10%
	Zone B4	0.080	0.016	0.016	10%	0.016	10%
	Zone C4	0.280	0.056	0.056	10%	0.056	10%
Fig 1 (14)	Web	0.110	0.022	0.022	20%	0.022	20%
	Zone B4	0.125	0.025	0.025	20%	0.025	20%
	Zone B4	0.080	0.016	0.016		0.016	
	Zone C4	0.280	0.056	0.056	20%	0.056	20%
Fig 1 (15)	Floor	0.050	0.010	0.010	5%	0.010	5%
	Zone B4 Zone C4	0.025	0.050	0.050	5%	0.050	5%
Fig 1 (16)	Floor Zone C4	0.080	0.016	0.016	10%	0.016	10%
Fig 1 (17)	Floor Zone C4	0.080	0.016	0.016	10%	0.016	10%
Fig 1 (18)	Support Zone C4	0.080	0.016	0.016	10%	0.016	10%
Fig 1 (20)	Support	0.080	0.016	0.016	10%	0.016	10%
	Zone B4	0.100	0.020	0.020	10%	0.020	10%
	Zone C4	0.171	0.034	0.034	10%	0.034	10%
Fig 1 (21)	Plate	0.120	0.024	0.024	10%	0.024	10%
	Zone B4	0.191	0.038	0.038	10%	0.038	10%
	Zone B4	0.070	0.014	0.014	10%	0.014	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (22)	Support Zone B4	0.291	0.058	0.058	20%	0.058	20%
	Zone B4	0.261	0.052	0.052	20%	0.052	20%
	Zone B4	0.080	0.016	0.016	20%	0.016	20%
	Zone B4	0.150	0.030	0.030	20%	0.030	20%
	Zone B4	0.200	0.040	0.040	20%	0.040	20%
Fig 1 (23)	Floor Zone B4	0.071	0.014	0.014	10%	0.014	10%
	Zone C4	0.040	0.008	0.008		0.008	
	Zone C4	0.032	0.006	0.006	10%	0.006	10%
Fig 1 (24)	Floor Zone B4	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.060	0.012	0.012	10%	0.012	10%
Fig 1 (25)	Floor Zone B4	0.110	0.022	0.022	10%	0.022	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%
Fig 1 (26)	Floor Zone B4	0.110	0.022	0.022	10%	0.022	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.060	0.012	0.012	10%	0.012	10%
	Zone B4	0.070	0.014	0.014	10%	0.014	10%
Fig 1 (27)	Stiffener Zone B4	0.063	0.012	0.012	20%	0.012	20%
Fig 1 (28)	Channel Zone B4	0.063	0.012	0.012	20%	0.012	20%
Fig 1 (29)	Angle Zone B4	0.050	0.010	0.010	20%	0.010	20%
Fig 1 (30)	Angle Zone B4	0.050	0.010	0.010	20%	0.010	20%
Fig 1 (31)	Channel Zone B4	0.050	0.010	0.010	20%	0.010	20%

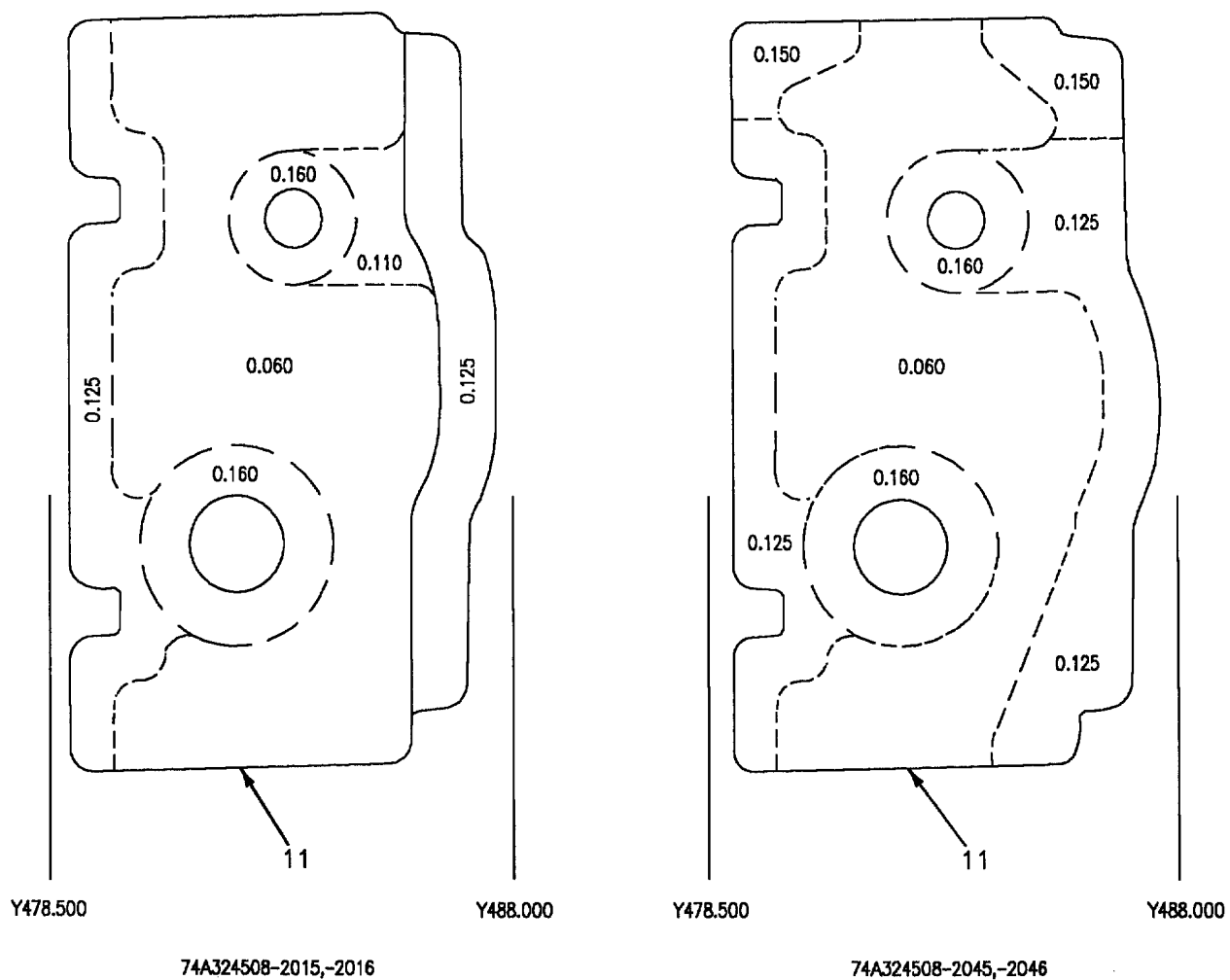
NOTE

1 See Figure 2.



02300101

Figure 1. Material Index (Sheet 1)



← FWD

A

Figure 1. Material Index (Sheet 2)

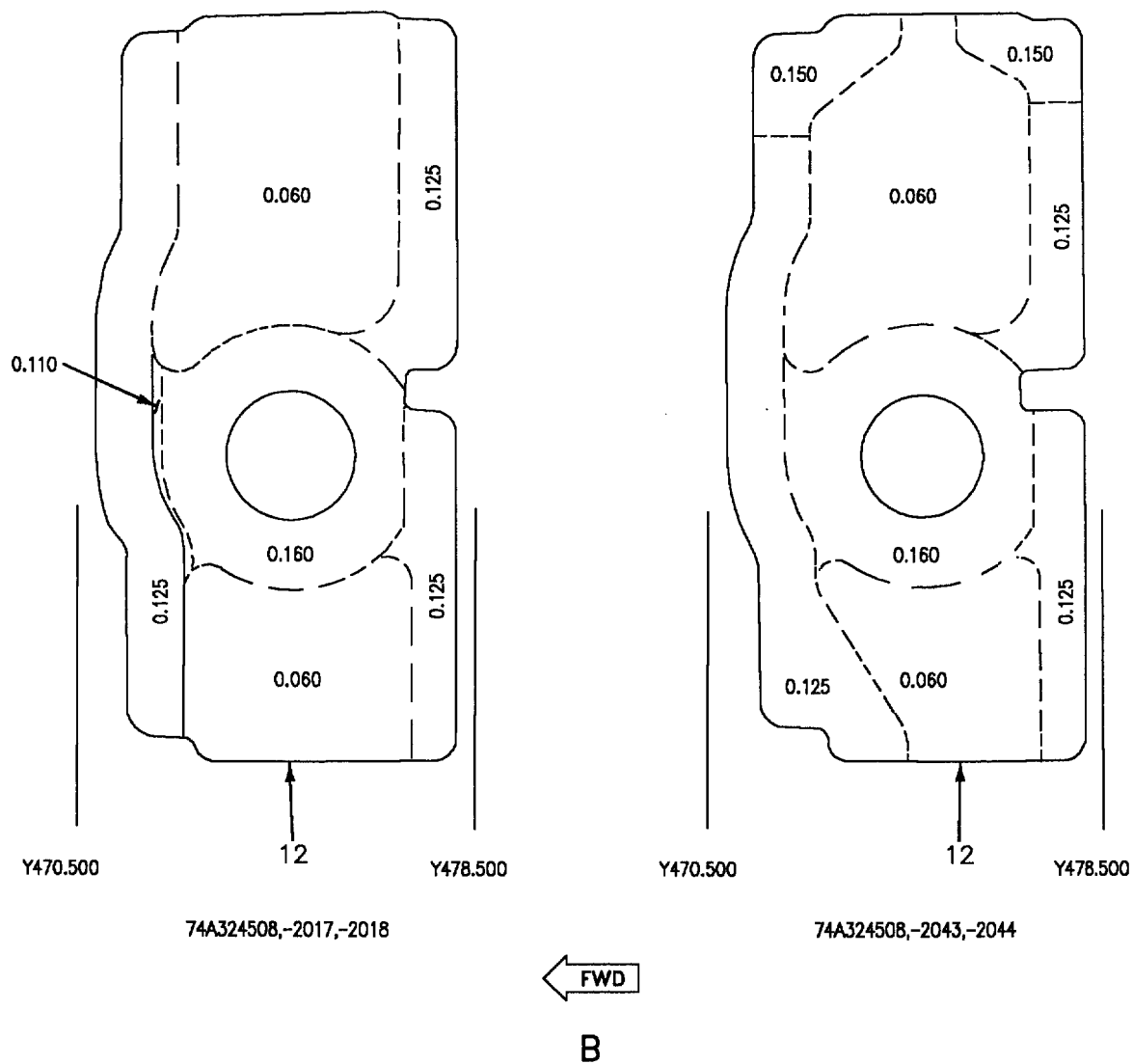
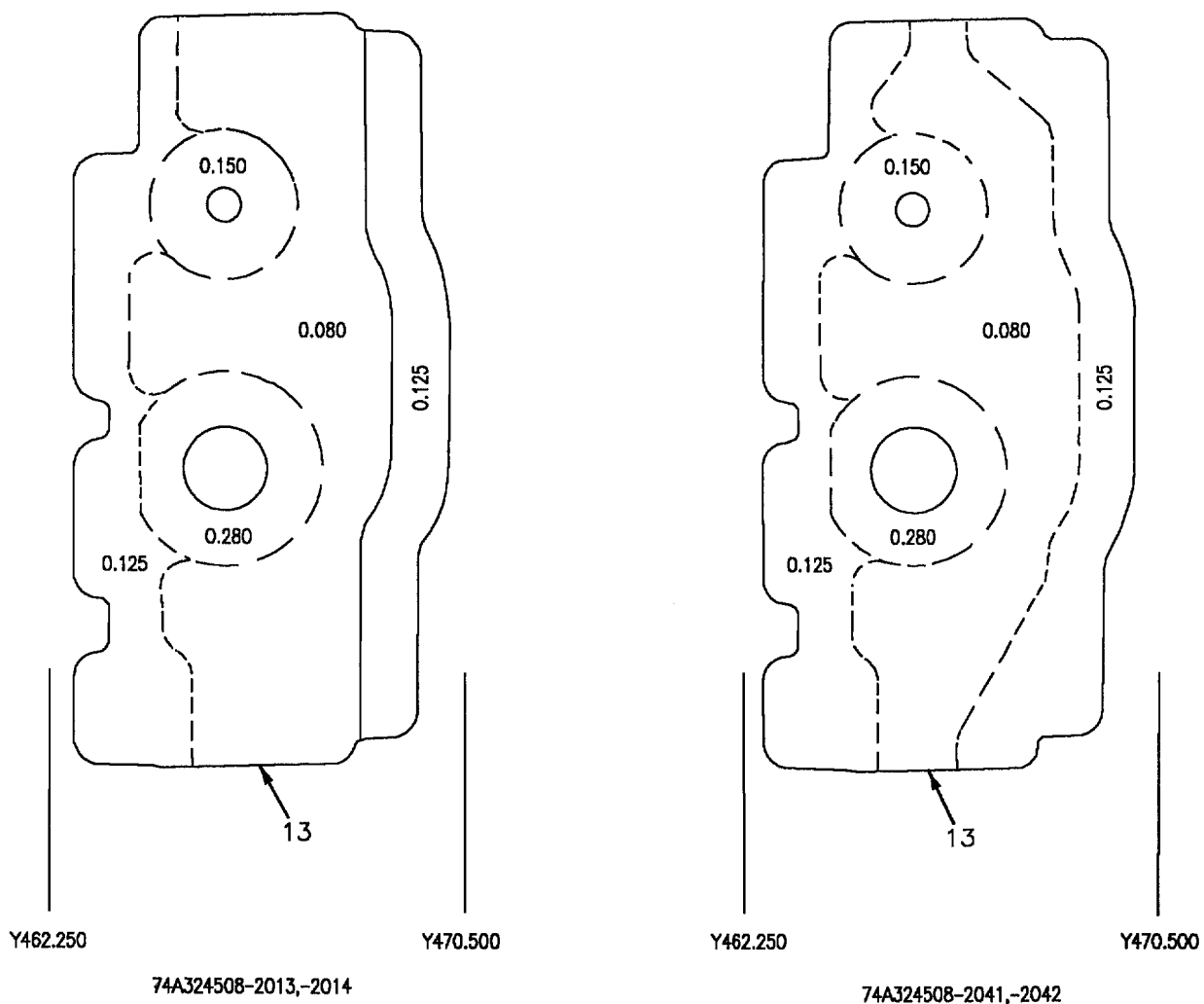


Figure 1. Material Index (Sheet 3)



← FWD

C

Figure 1. Material Index (Sheet 4)

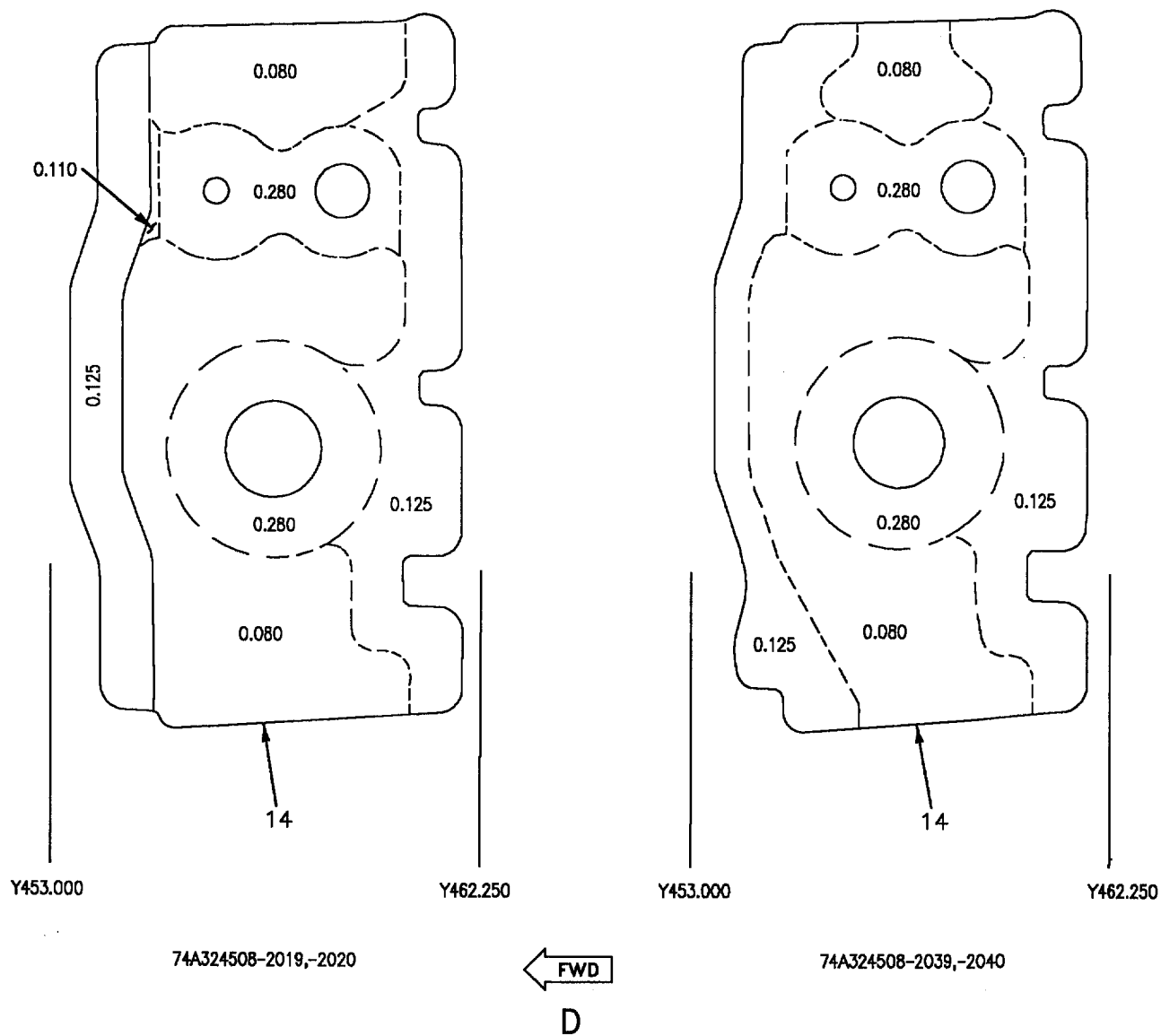


Figure 1. Material Index (Sheet 5)

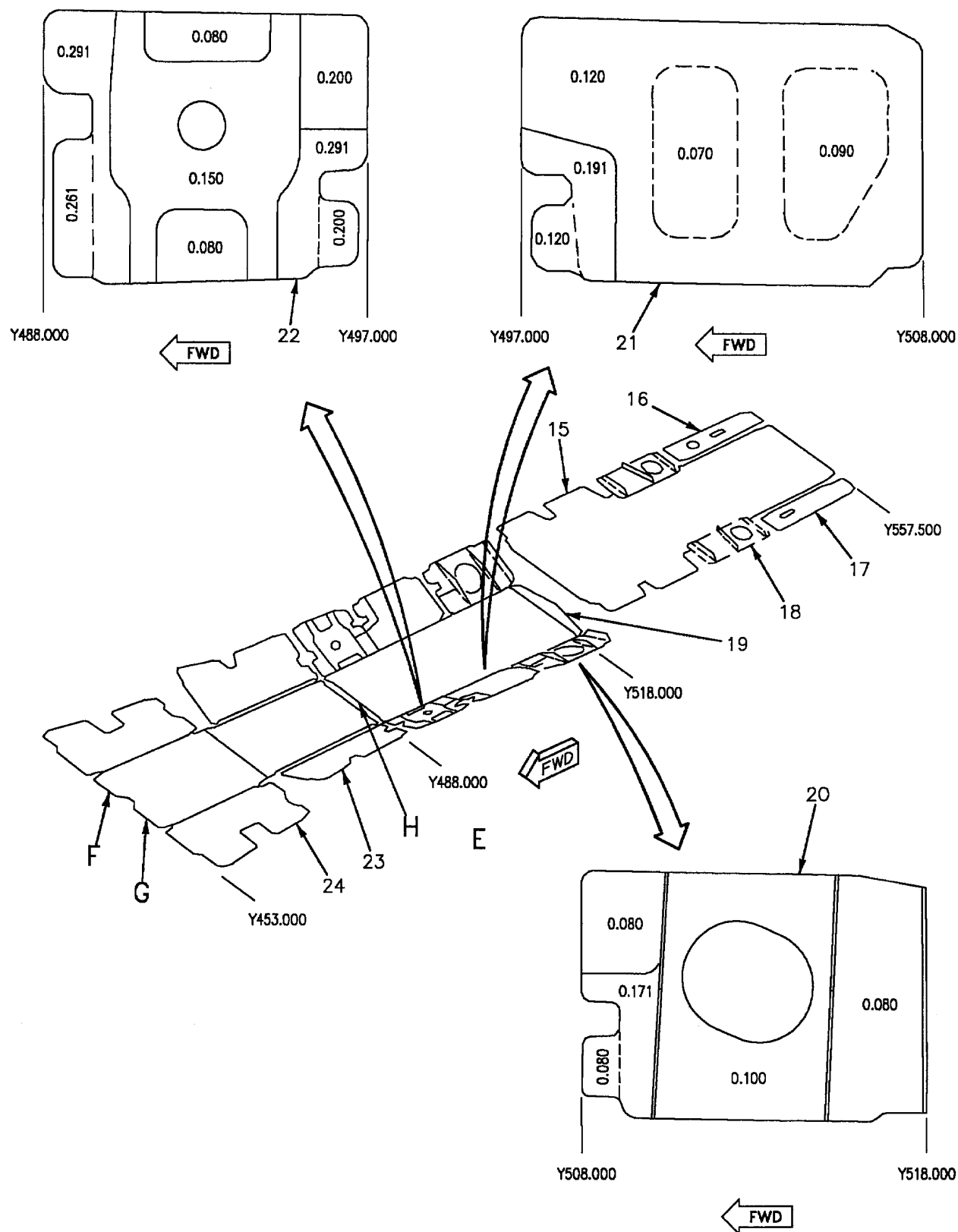


Figure 1. Material Index (Sheet 6)

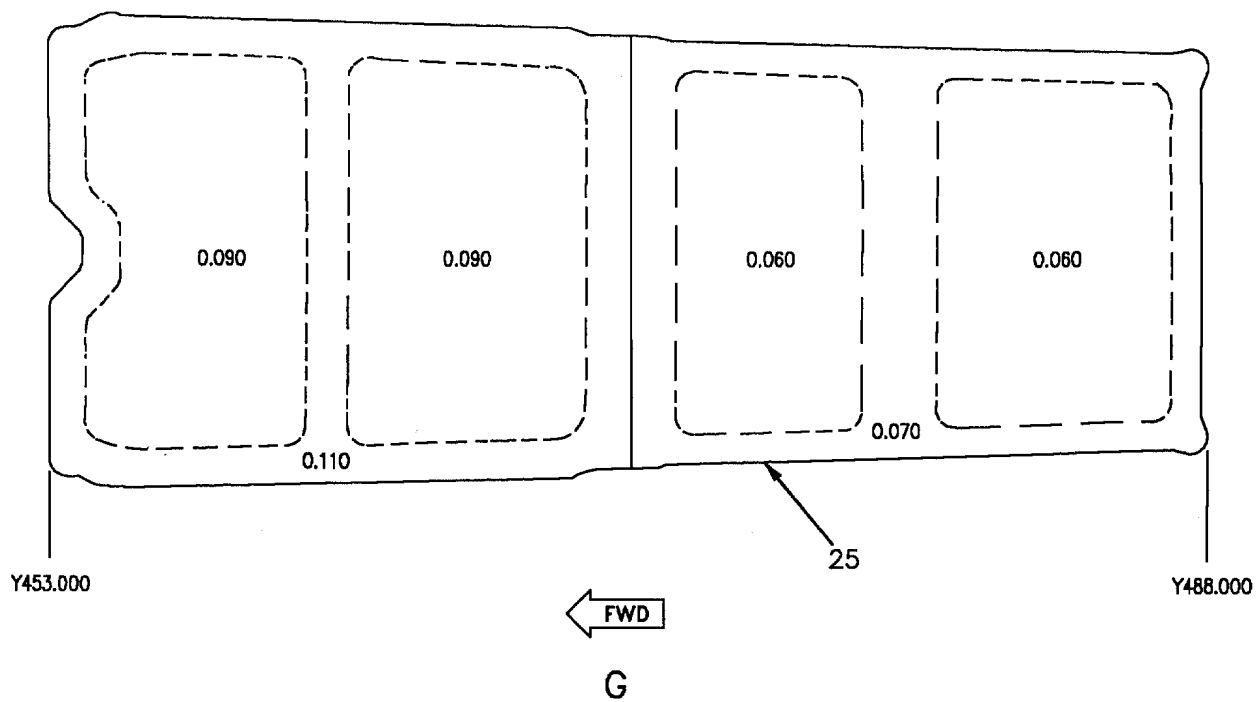
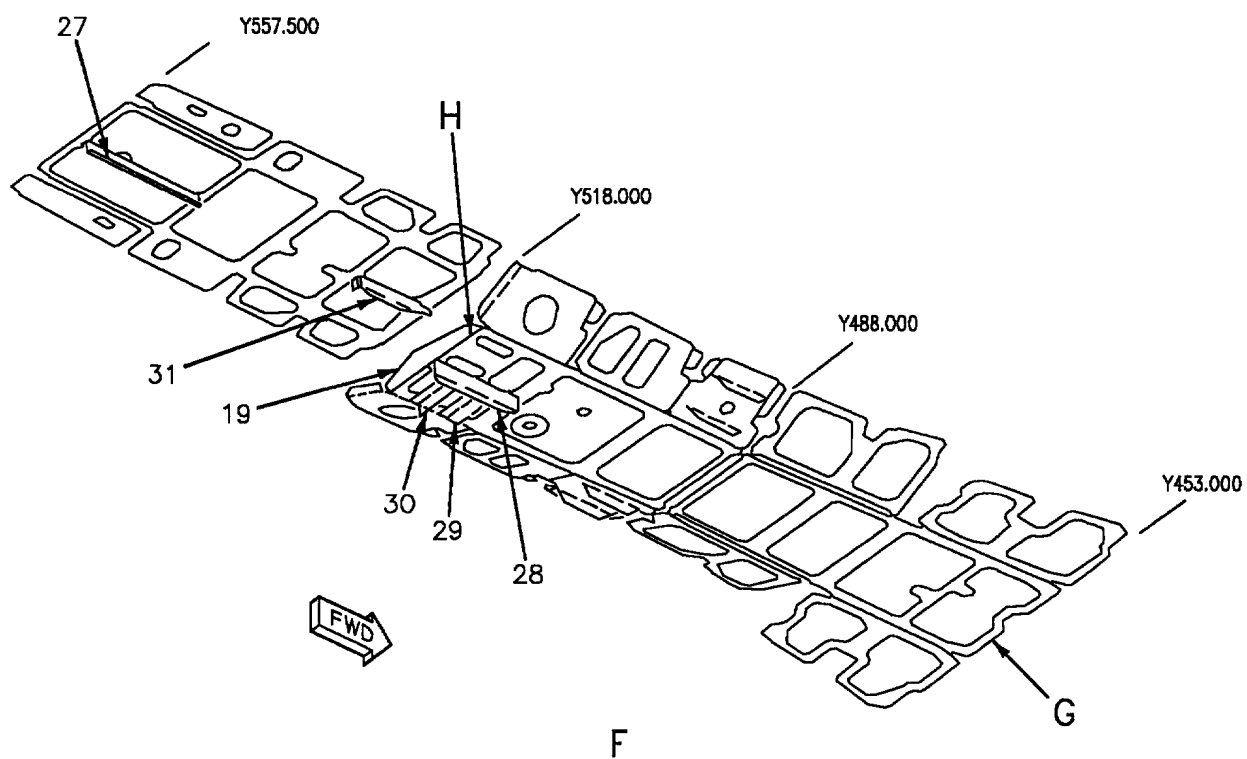
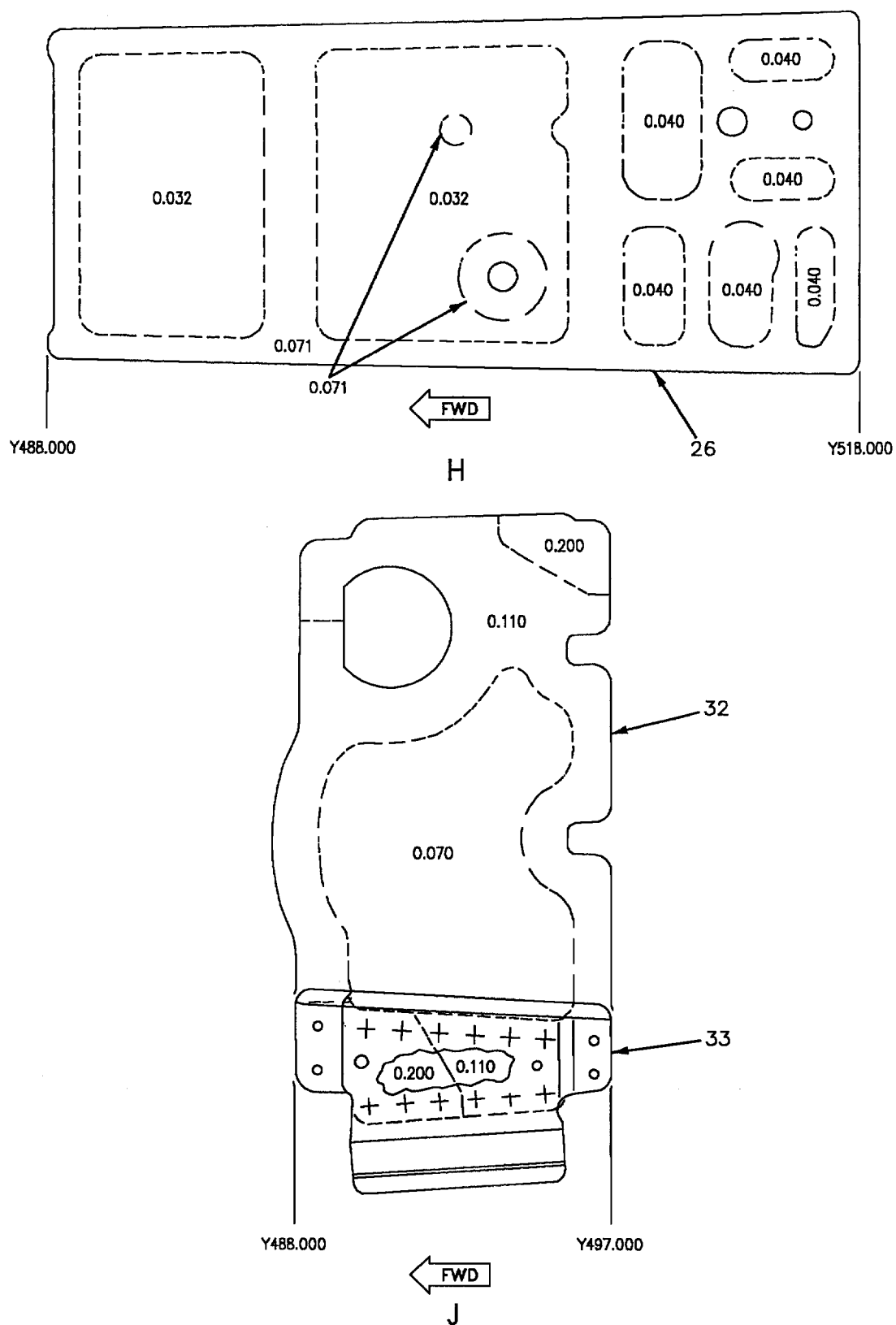


Figure 1. Material Index (Sheet 7)


















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2		Stiffener 74A324527-2003, -2004	1MA163D06-10030 Extr	7075-T76511 Al Aly
3		Web 74A324527-2007, -2008	 Sheet	7075-T76 Alclad
4		Stiffener 74A324527-2011, -2012	1MA163D06-10037 Extr	7075-T76511 Al Aly
5		Stringer 74A324558-2001	1MA160D06-10273 Extr	7075-T76511 Al Aly
6		Web 74A324504-2009, -2010	 Sheet	7075-T6 Al Aly
7		Web 74A324504-2007, -2008	 Sheet	7075-T6 Al Aly
8		Web 74A324504-2005, -2006	 Sheet	7075-T6 Al Aly
9		Web 74A324504-2003, -2004	 Sheet	7075-T76 Alclad
10		Web 74A324504-2001, -2002	 Sheet	7075-T76 Al Aly
11	 	Web 74A324508-2015, -2016 74A324508-2045, -2046	0.190 Sheet	7075-T76 Al Aly
12	 	Web 74A324508-2017, -2018 74A324508-2043, -2044	0.190 Sheet	7075-T76 Al Aly
13	 	Web 74A324508-2013,-2014 74A324508-2041,-2042	0.312 Plate	7075-T7351 Al Aly
14	 	Web 74A324508-2019, -2020 74A324508-2039, -2040	0.312 Plate	7075-T7351 Al Aly
15		Floor 74A324424-2007	 Sheet	6Al-4V Ti Anl
16		Floor 74A324445-2007	0.080 Sheet	6Al-4V Ti Anl
17		Floor 74A324445-2005	0.080 Sheet	6Al-4V Ti Anl

Figure 1. Material Index (Sheet 9)








Idx No.	Eft	Nomenclature and Part No.	Description	Material
18		Support 74A324444-2001, -2002	0.625 Plate	7075-T7351 Al Aly
19		Doubler 74A324040-2013	0.071 Sheet	6Al-4V Ti Anl
20		Support 74A324443-2001, -2002	1.00 Plate	7075-T7351 Al Aly
21		Plate 74A324431-2009, -2010 74A324431-9001, -9002 74A324431-2011, -2012	0.200 Sheet	7075-T76 Al Aly
22		Support 74A324446-2001, -2002 74A324446-2005, -2006 74A324446-9001, -9002	1.25 Plate	7075-T7351 Al Aly
23		Floor 74A324425-2005, -2006 74A324425-2045, -2046 74A324425-9001, -9002	 Sheet	7075-T76 Al Aly
24		Floor 74A324425-2003, -2004 74A324425-2011, -2012	 Sheet	7075-T76 Al Aly
25		Floor 74A324425-2007	0.125 Sheet	7075-T76 Al Aly
26		Floor 74A324423-2003 74A324423-9001 74A324423-2005 74A324423-2007	Sheet	7075-T6 Al Aly
27		Stiffener 74A324040-2043	0.063 Sheet	6Al-4V Ti Anl
28		Channel 74A324040-2015	0.063 Sheet	7075-T62 Al Aly
29		Angle 74A324040-2025	0.050 Sheet	7075-T62 Al Aly
30		Angle 74A324040-2027	0.050 Sheet	7075-T62 Al Aly
31		Channel 74A324040-2005	0.050 Sheet	6Al-4V Ti Anl

Figure 1. Material Index (Sheet 10)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
32	<div>10</div> <div>11</div>	Plate 74A324559-2003, -2004 74A324559-2005, -2006	0.250 Plate	7075-T7351 Al Aly
33	<div>10</div> <div>11</div>	Intercostal 74A324543-2001, -2002 74A324543-2003, -2004	0.063 Sheet	7075-0 Alclad
<p style="text-align: center;">LEGEND</p> <div>1</div> Land is 0.090 and bays are 0.040. <div>2</div> Land is 0.050 and bays are 0.025. <div>3</div> 161353 THRU 161360. <div>4</div> 161361 THRU 161705, 161707. <div>5</div> Land is 0.050 and bays are 0.030. <div>6</div> Land is 0.100 and bays are 0.060. <div>7</div> Land is 0.090 and bays are 0.060. <div>8</div> Land is 0.110 and bays are 0.090. <div>9</div> 161716 AND UP. <div>10</div> 161353 THRU 161704. <div>11</div> 161705 AND UP. <div>12</div> 161353 THRU 161366. <div>13</div> 161367 THRU 161719. <div>14</div> 161720 AND UP. <div>15</div> 161705 THRU 161720. <div>16</div> 161721 AND UP. <div>17</div> 161706, 161708 THRU 161715.				

Figure 1. Material Index (Sheet 11)

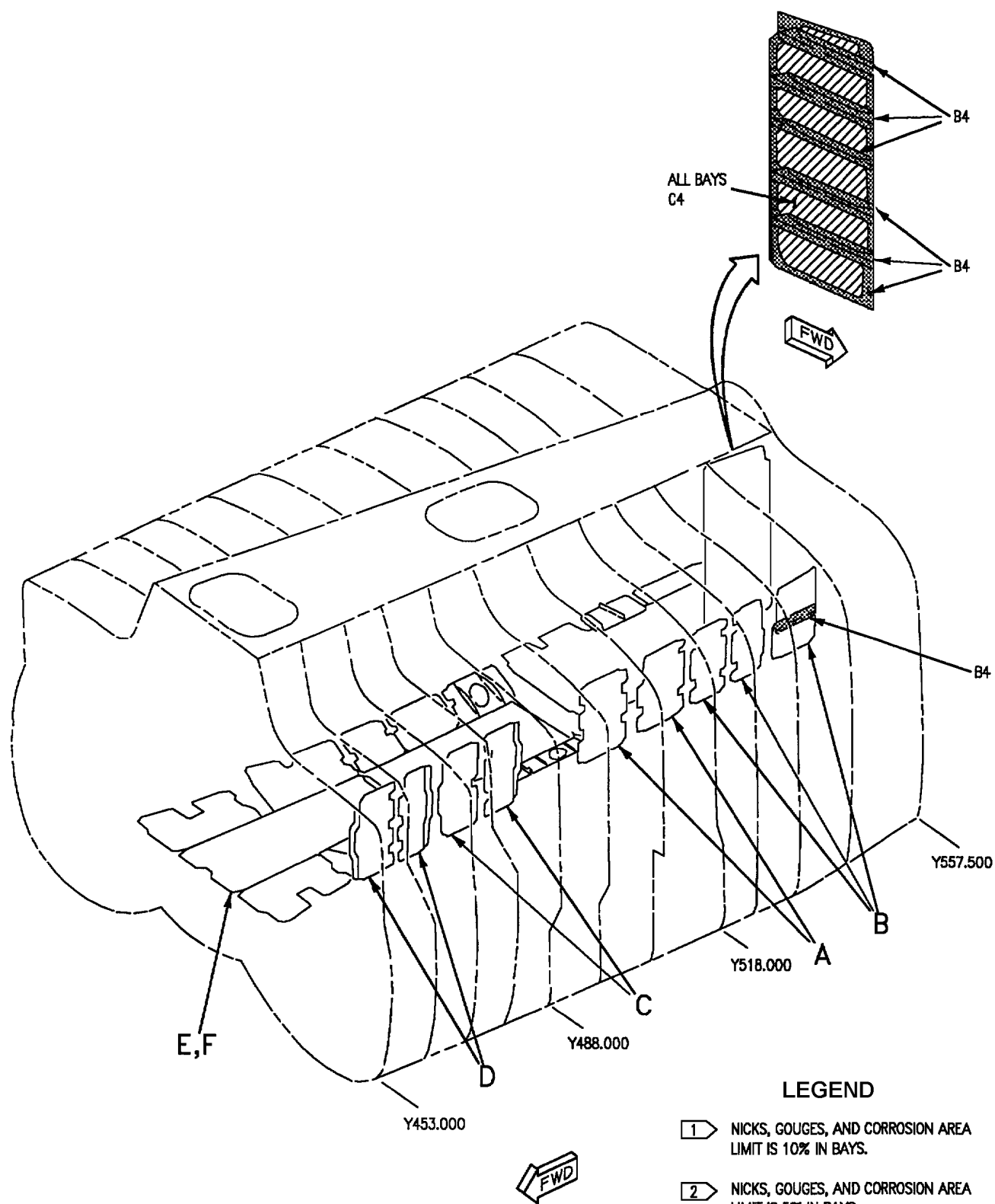
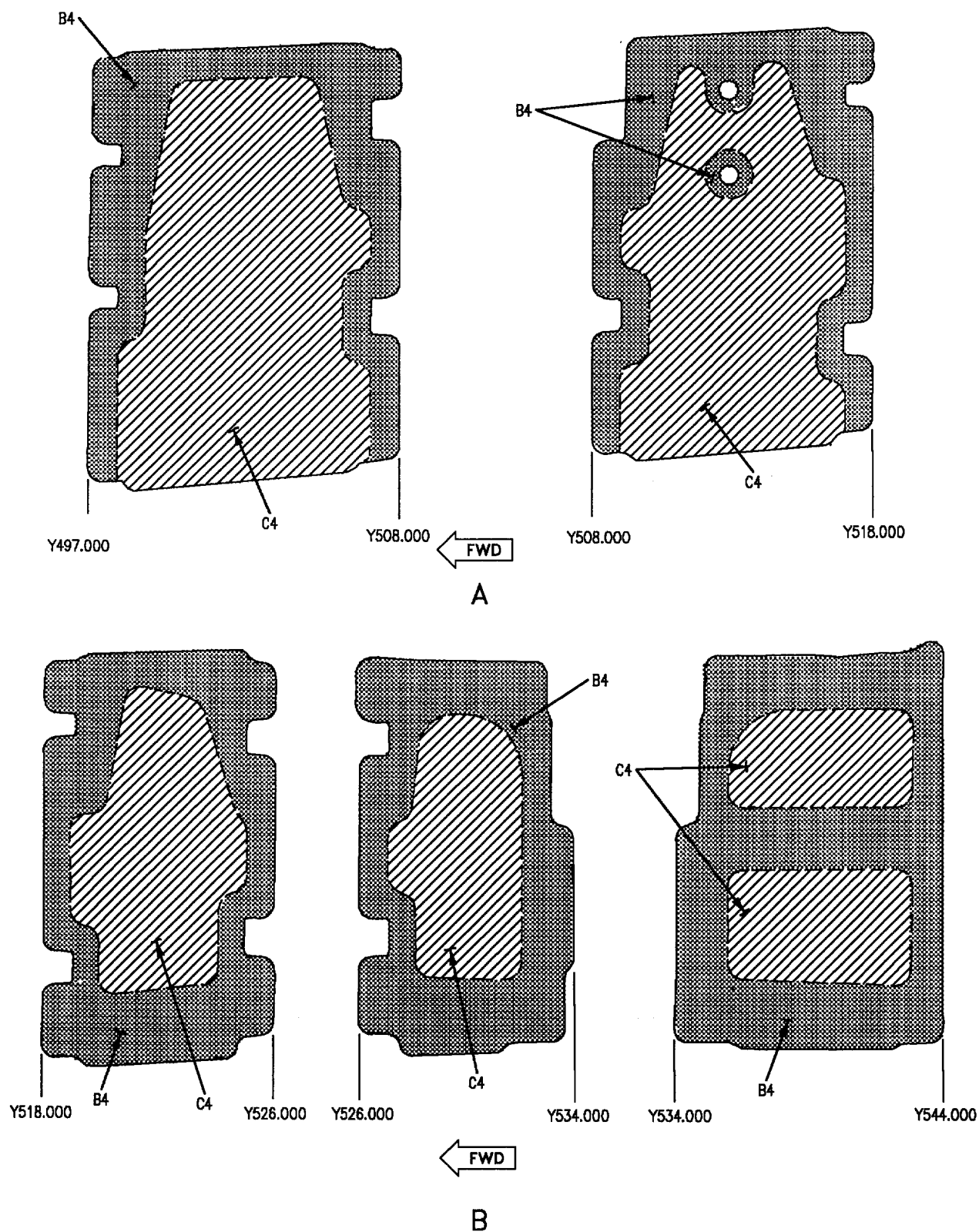


Figure 2. Repair Zones (Sheet 1)



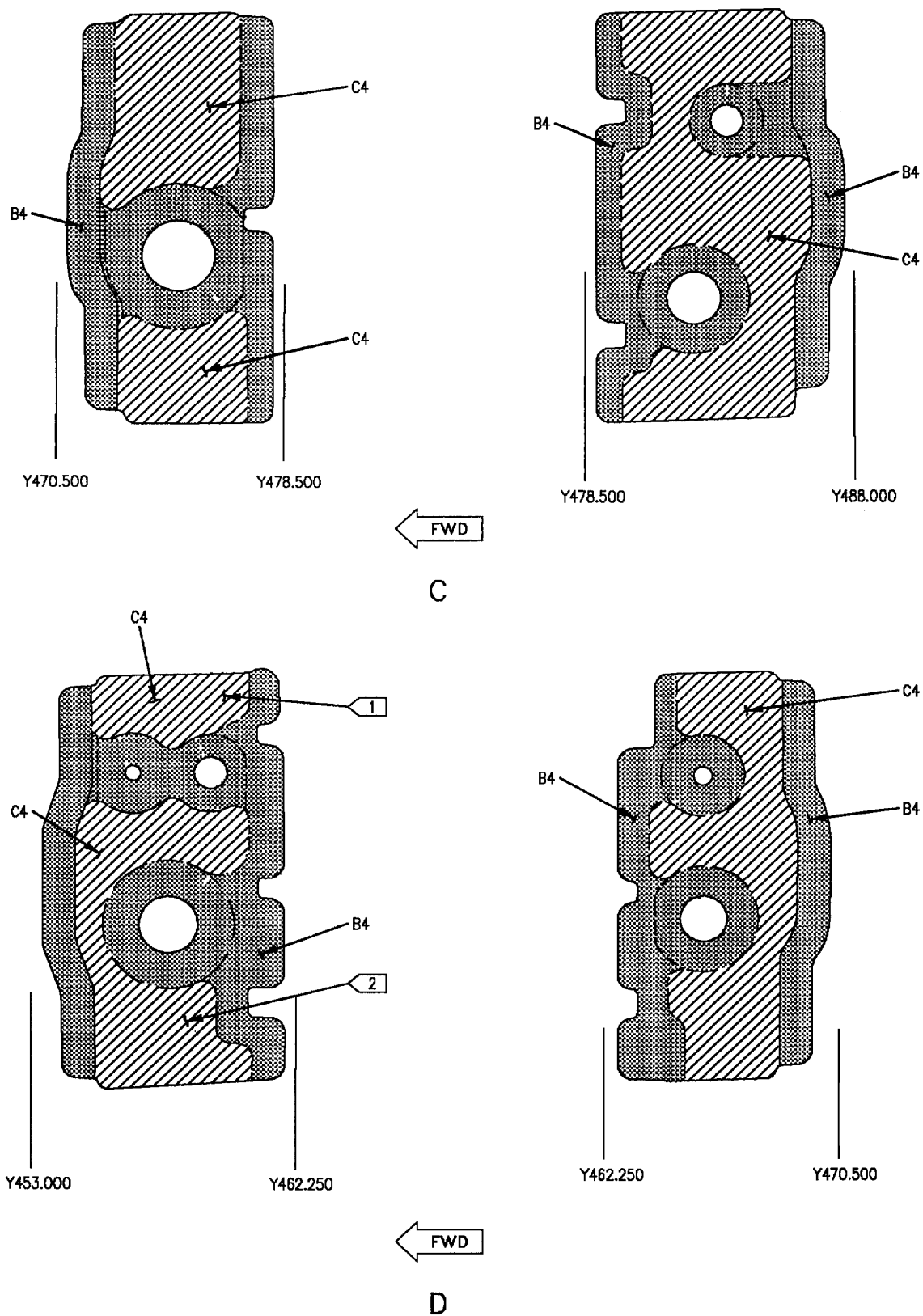


Figure 2. Repair Zones (Sheet 3)

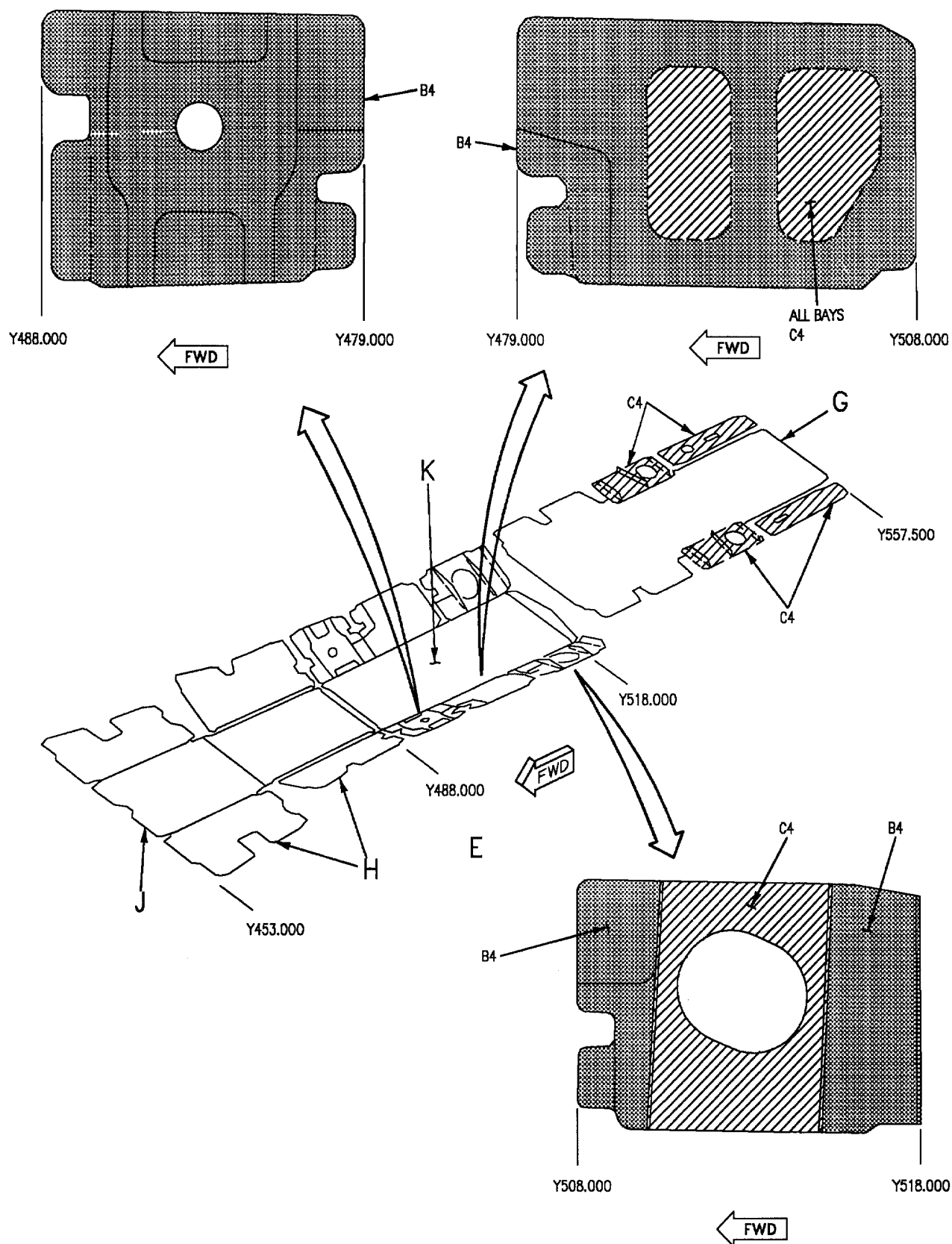


Figure 2. Repair Zones (Sheet 4)

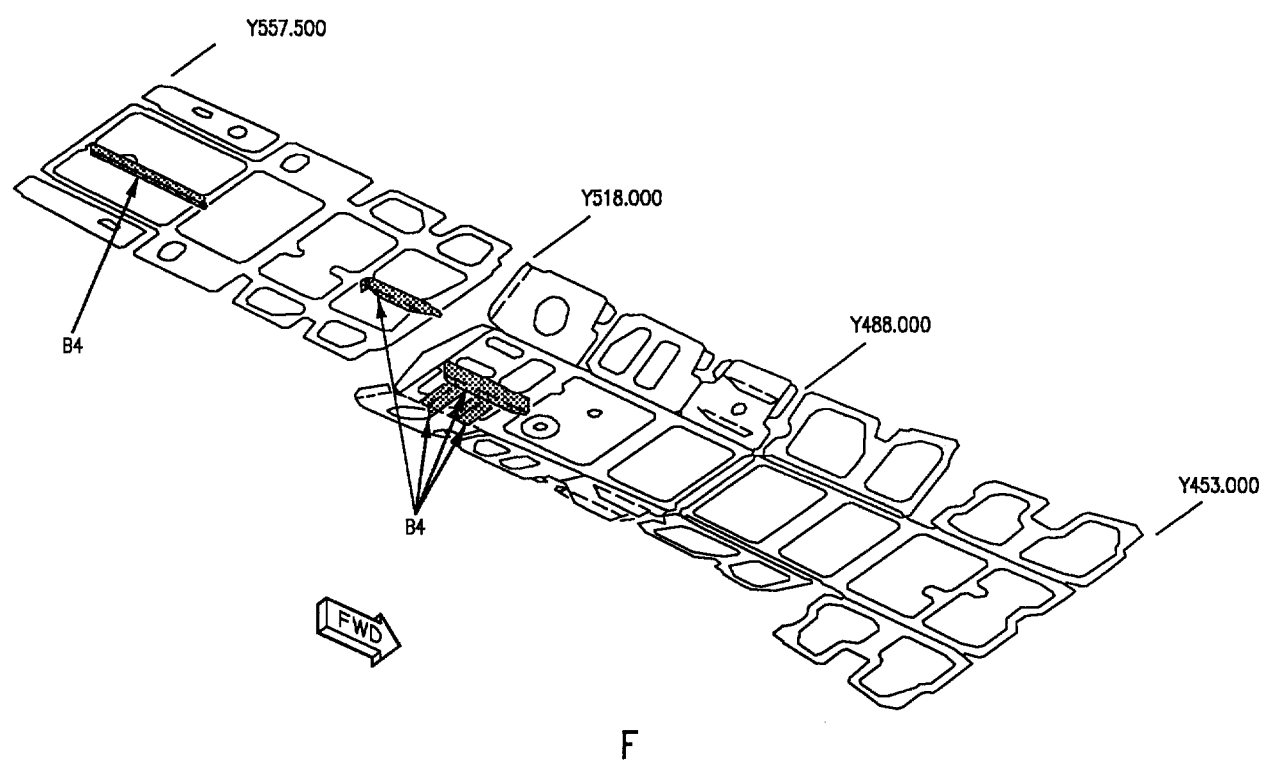


Figure 2. Repair Zones (Sheet 5)

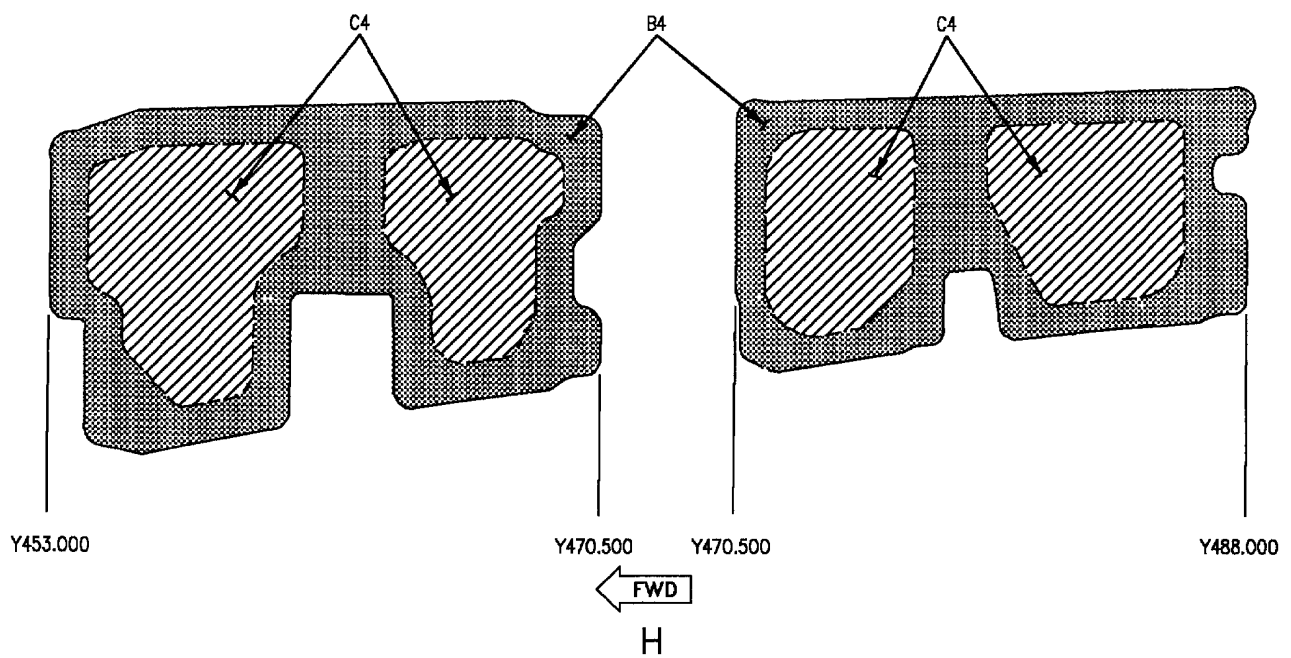
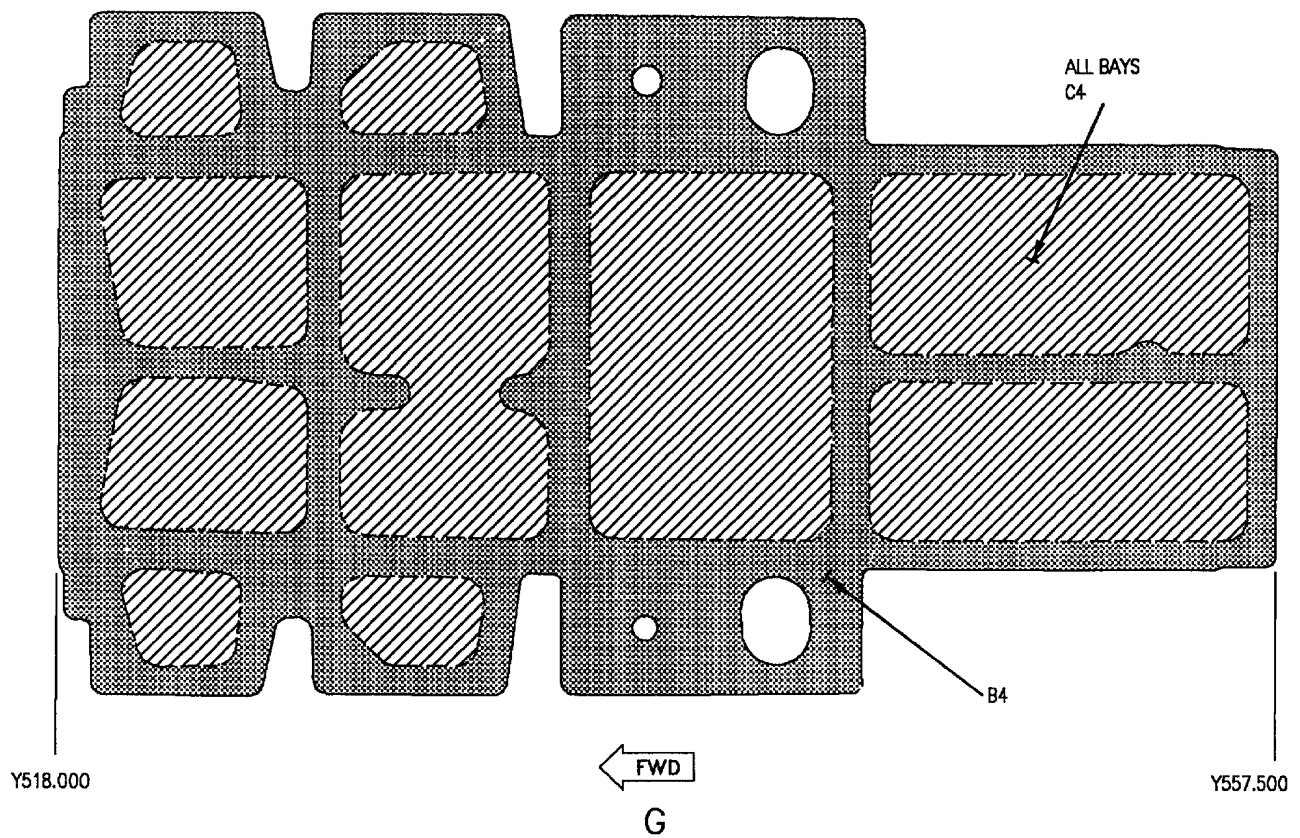


Figure 2. Repair Zones (Sheet 6)

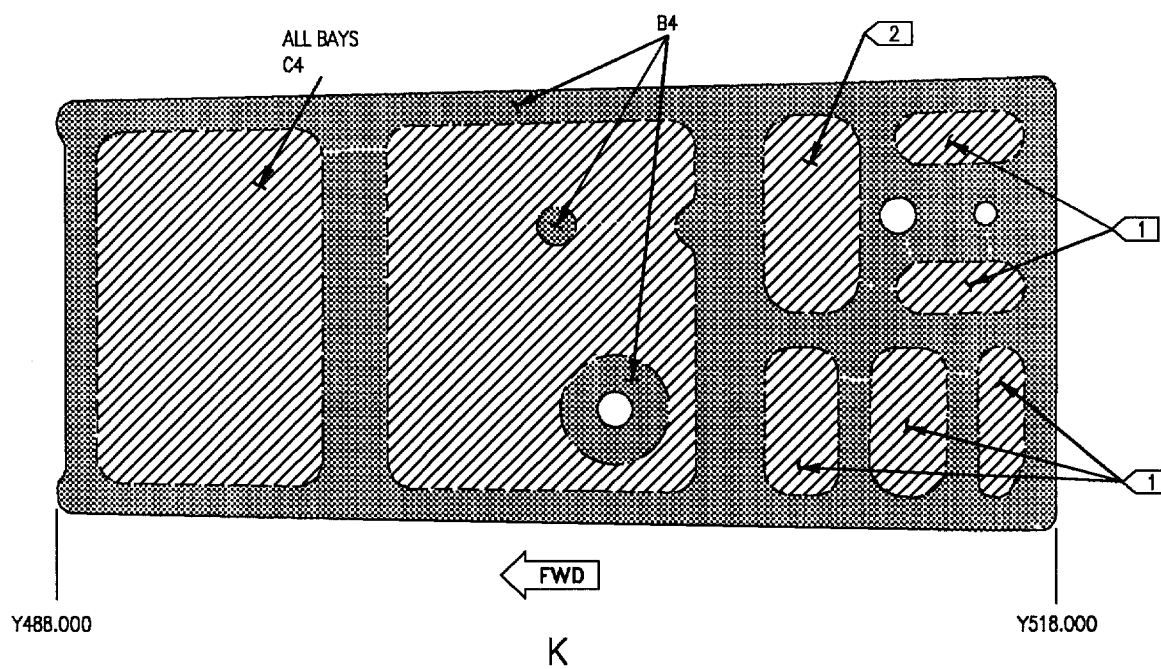
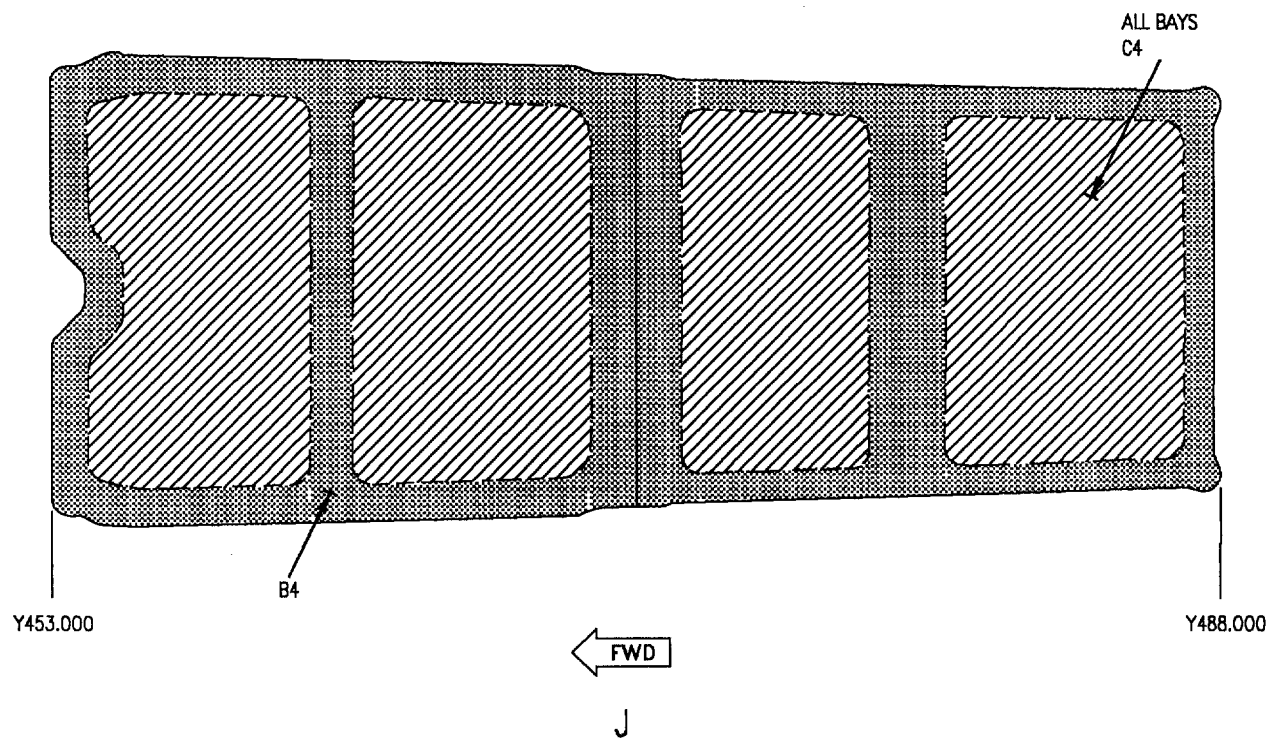


Figure 2. Repair Zones (Sheet 7)

ORGANIZATIONAL MAINTENANCE
STRUCTURE REPAIR
NUMBER 4 FUEL TANK FLOOR AND WEBS
EFFECTIVITY: 161742 AND UP

Reference Material

None

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Repairs	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.

1. **DAMAGE EVALUATION.** See figure 1.

5. **REPAIRS.**

2. The figure identifies types of material used. Data shown can be used to analyze damage.

6. Repairs require depot engineering disposition.

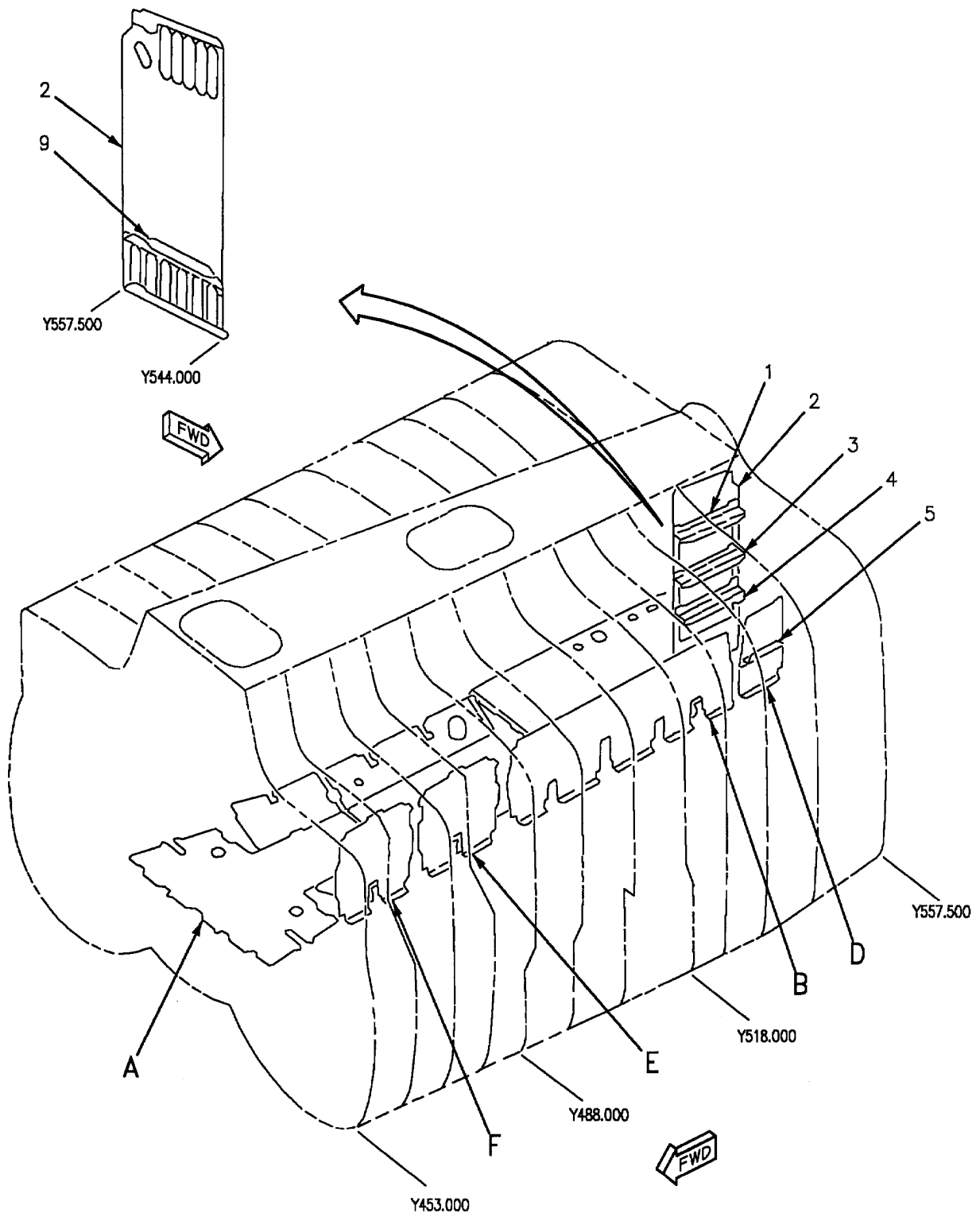


Figure 1. Material Index (Sheet 1)

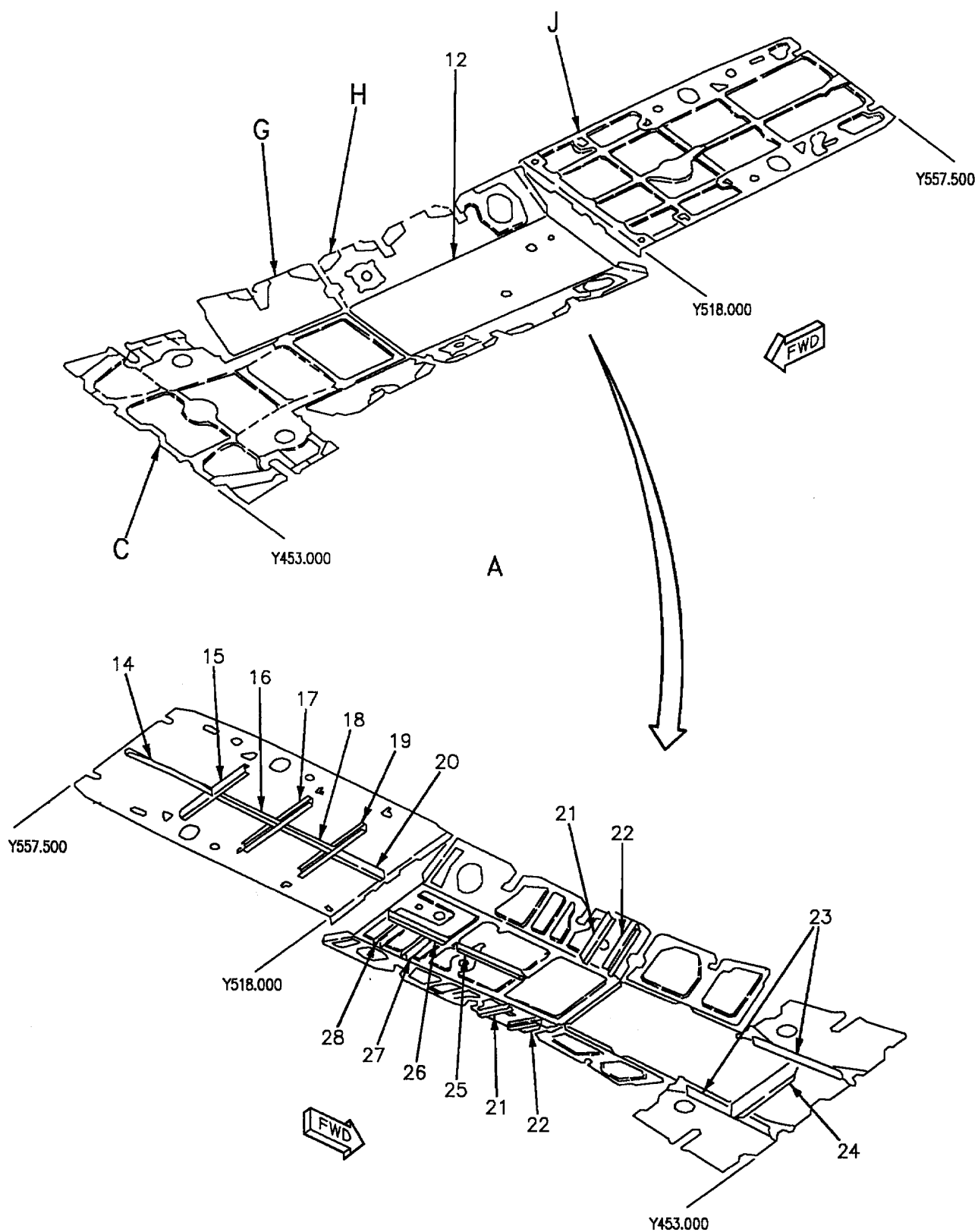


Figure 1. Material Index (Sheet 2)

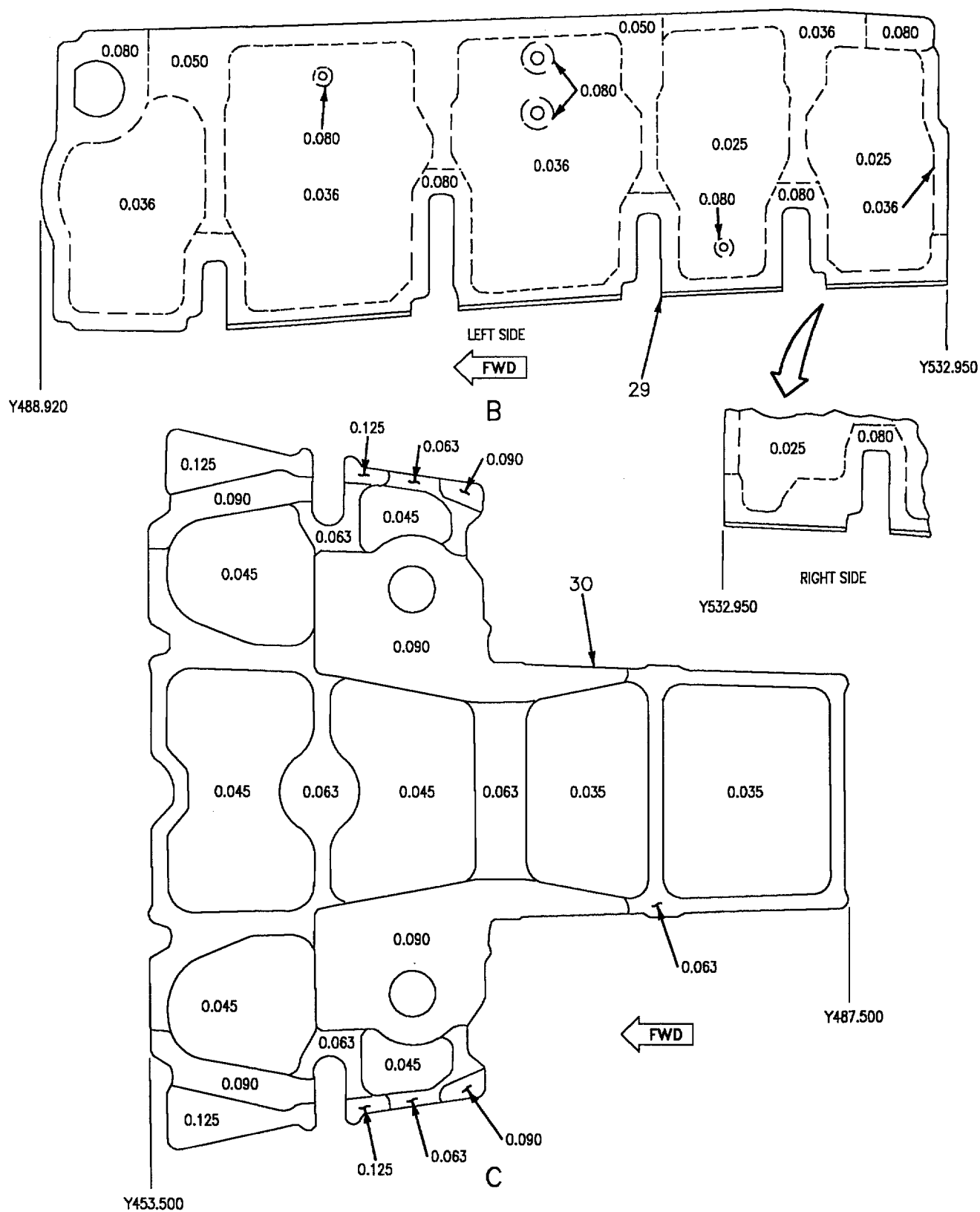


Figure 1. Material Index (Sheet 3)

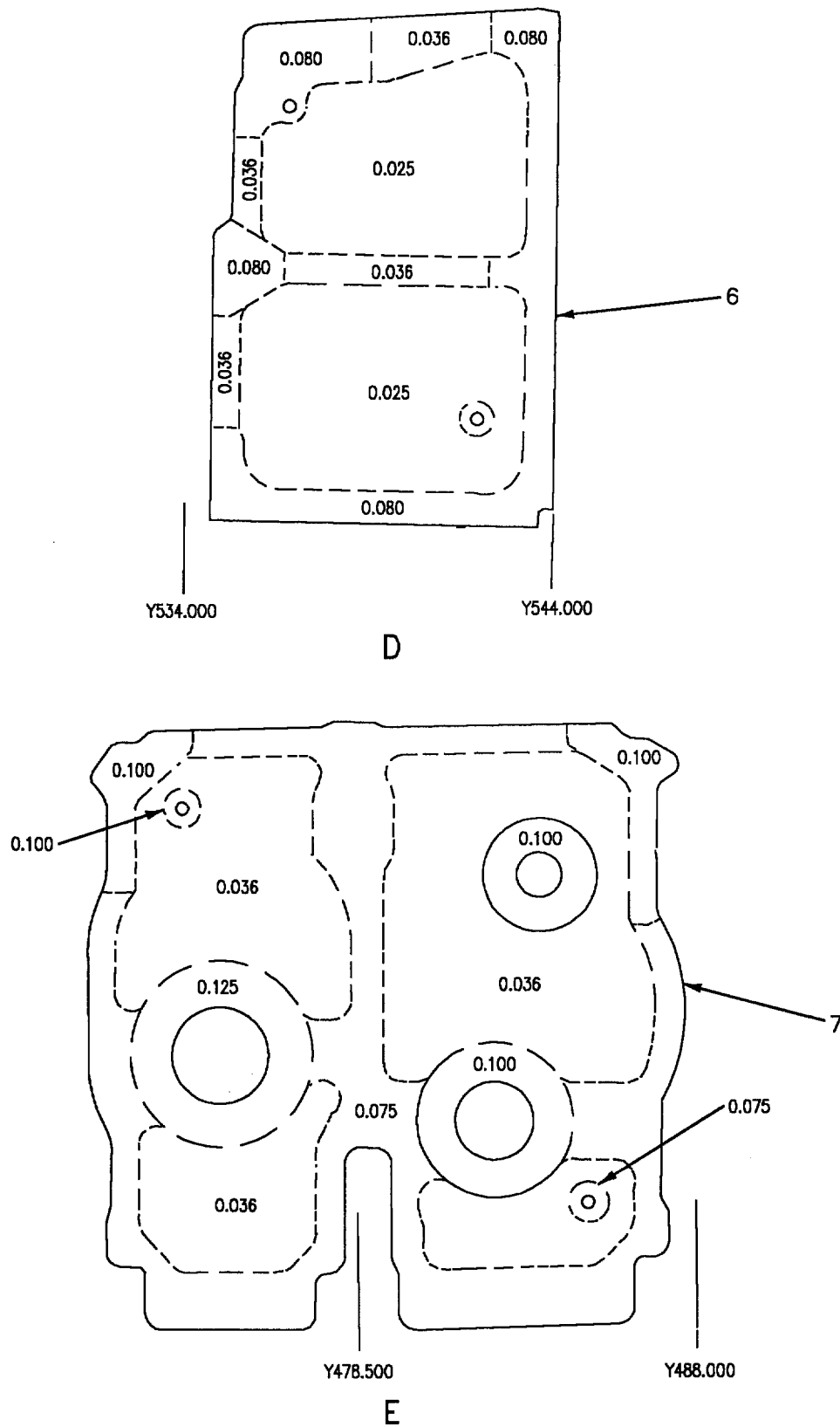


Figure 1. Material Index (Sheet 4)

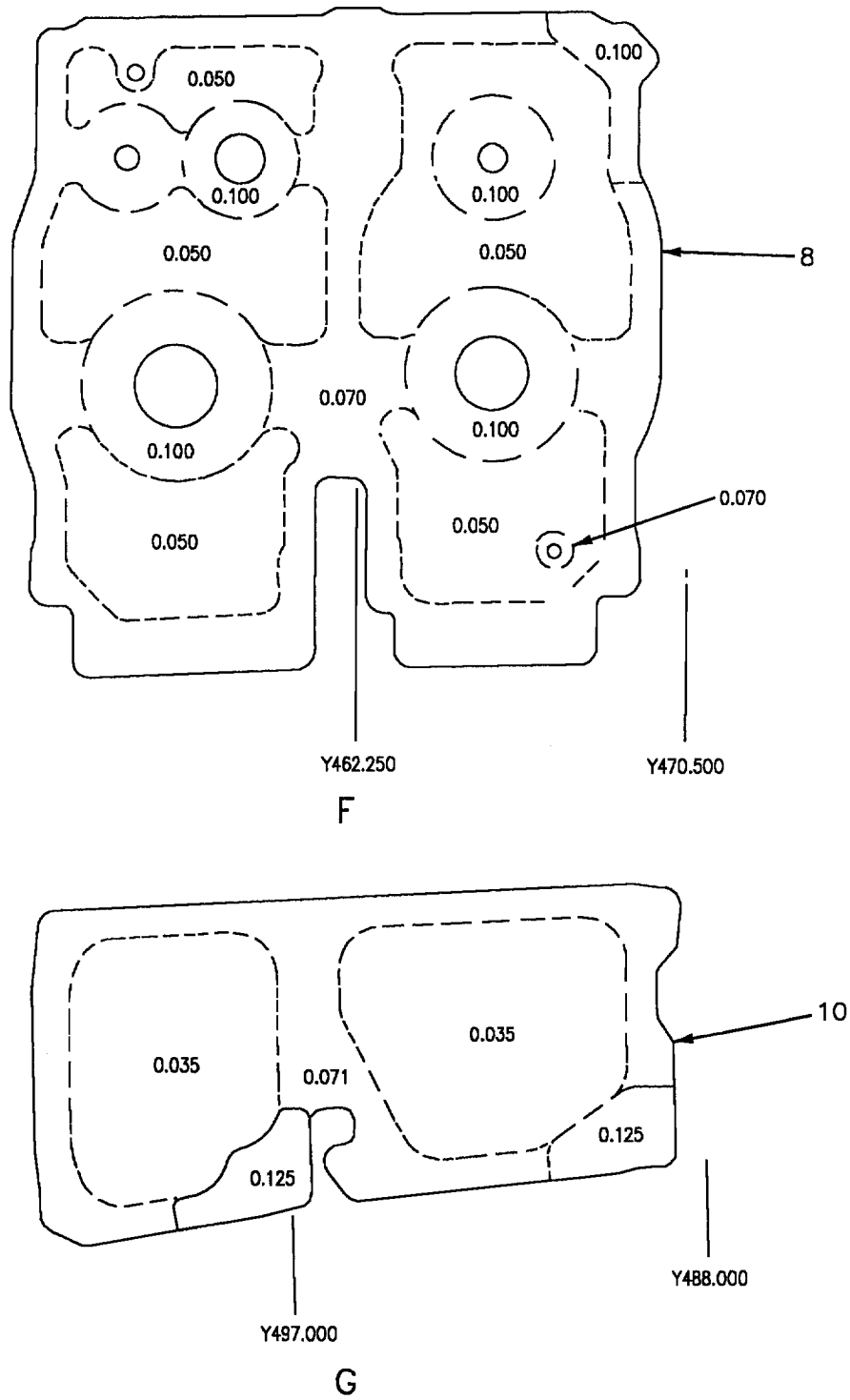


Figure 1. Material Index (Sheet 5)

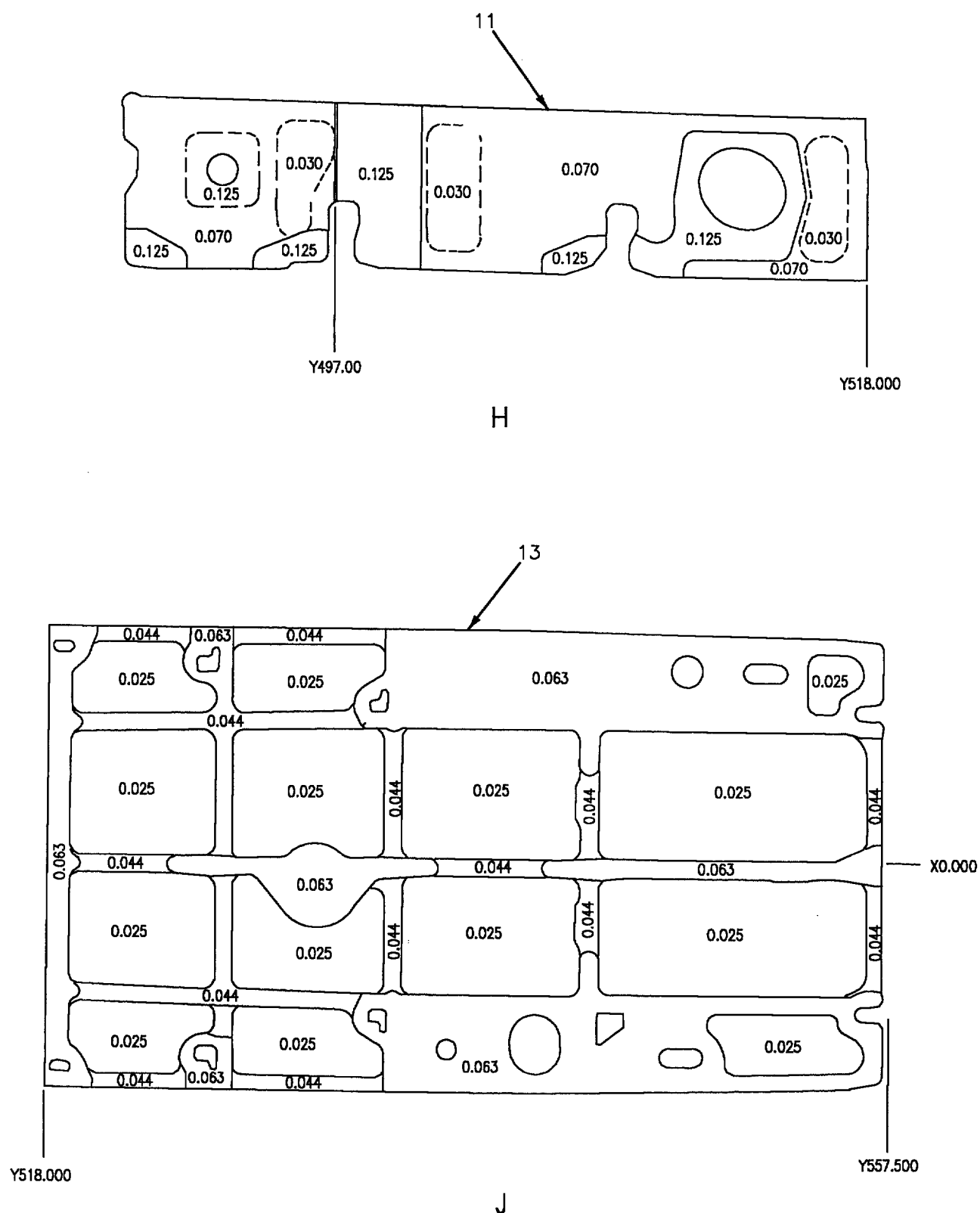


Figure 1. Material Index (Sheet 6)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1	<div>9</div> <div>15</div> <div>14</div>	Stiffener 74A324508-2059, -2060 74A324508-9011, -2056 74A324508-2069, -2060	1MA180D06-10111 Extr	7075-T76511 Al Aly
2	<div>30</div> <div>31</div>	Web 74A324508-2053, -2054 74A324508-2083, -2084	<div>26</div> Sheet	7075-T62 Al Aly
3		Stiffener 74A324508-2059, -2060	1MA180D06-10111 Extr	7075-T76511 Al Aly
4		Stiffener 74A324508-2057, -2058	1MA180D06-10111 Extr	7075-T76511 Al Aly
5		Stiffener 74A324508-2051, -2052	1MA180D06-10111 Extr	7075-T76511 Al Aly
6	<div>24</div> <div>25</div>	Web 74A324508-2047, -2048 74A324508-2081, -2082	0.080 Sheet	7075-T62 Al Aly
7		Web 74A324508-2025, -2026	0.125 Sheet	7075-T76 Al Aly
8		Web 74A324508-2021, -2022	0.100 Sheet	7075-T76 Al Aly
9		Stiffener 74A324508-2055, -2056	1MA140D06-10033 Extr	7075-T76511 Al Aly
10	<div>18</div> <div>19</div> <div>27</div>	Web 74A324425-2055, -2056 74A324425-9013, -9014 74A324425-2073, -2074	0.125 Sheet	7075-T76 Alclad
11	<div>6</div> <div>28</div> <div>29</div>	Web 74A324425-2013, -2014 74A324425-9021, -9022 74A324425-2081, -2082	0.125 Sheet	7075-T62 Al Aly
12	<div>1</div> <div>2</div> <div>11</div>	Web 74A324425-2061 74A324425-9005 74A324425-2067	<div>5</div> Sheet	7075-T6 Alclad

Figure 1. Material Index (Sheet 7)











Idx No.	Eft	Nomenclature and Part No.	Description	Material
13	  	Web 74A324424-2041 74A324424-9011 74A324424-2043	0.063 Sheet	6Al-4V Ti Anl
14		Stiffener 74A324424-2025	0.071 Sheet	7075-T6 Al Aly
15		Stiffener 74A324424-2037	0.071 Sheet	6Al-4V Ti Anl
16		Stiffener 74A324424-2023	0.050 Sheet	7075-T6 Al Aly
17		Stiffener 74A324424-2033	0.050 Sheet	6Al-4V Ti Anl
18		Stiffener 74A324424-2021	0.040 Sheet	7075-T6 Al Aly
19		Stiffener 74A324424-2029	0.050 Sheet	6Al-4V Ti Anl
20		Stiffener 74A324424-2015	0.050 Sheet	6Al-4V Ti Anl
21	 	Channel 74A324425-9009, -9010 74A324425-2071, -2072	0.040 Sheet	7075-T62 Al Aly
22		Stiffener 74A324425-2015, -2016	0.040 Sheet	7075-T62 Al Aly
23		Stringer 74A324425-2021, -2022	1MA160D06-10432 Extr	7075-T76511 Al Aly
24		Stiffener 74A324425-2043	0.063 Sheet	7075-T62 Al Aly
25		Stiffener 74A324425-2047	0.040 Sheet	7075-0 Al Aly
26	 	Stiffener 74A324425-2049 74A324425-2075	0.050 Sheet	7075-0 Al Aly
27		Support 74A324340-2015	1MA10572-005 Extr	7075-T73511 Al Aly
28		Support 74A324340-2013	1MA10572-005 Extr	7075-T73511 Al Aly

Figure 1. Material Index (Sheet 8)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
29	<div>16</div> <div>17</div> <div>22</div> <div>23</div>	Web 74A324508-2029, -2030 74A324508-2067, -2068 74A324508-9015, -9016 74A324508-2077, -2078	0.080 Sheet	7075-T62 Al Aly
30	<div>8</div> <div>7</div>	Web 74A324425-2059 74A324425-2065		
<p style="text-align: center;">LEGEND</p> <div>1</div> 161760 THRU 161940, 161942, 161943. <div>2</div> 161742 THRU 161759, 161941. <div>3</div> 161742 THRU 161747. <div>4</div> 161748 THRU 161939. <div>5</div> Land is 0.071 and bays 0.030. <div>6</div> 161742 THRU 162411. <div>7</div> 161945 AND UP. <div>8</div> 161742 THRU 161944. <div>9</div> 161742 THRU 161751. <div>10</div> 161940 AND UP. <div>11</div> 161944 AND UP. <div>12</div> 161742 THRU 161945. <div>13</div> 161946 AND UP. <div>14</div> 161961 AND UP. <div>15</div> 161752 THRU 161960. <div>16</div> 161742 THRU 161965. <div>17</div> 161966 THRU 162477. <div>18</div> 161742 THRU 161979. <div>19</div> 161980 THRU 162444. <div>20</div> 162415 AND UP. <div>21</div> 161742 THRU 162414. <div>22</div> 162826 THRU 162852. <div>23</div> 162853 AND UP. <div>24</div> 161742 THRU 162459. <div>25</div> 162460 AND UP. <div>26</div> Upper and lower land is 0.050, remaining lands are 0.035 and bays are 0.020. <div>27</div> 162445 AND UP. <div>28</div> 162412 THRU 162477. <div>29</div> 162826 AND UP. <div>30</div> 161742 THRU 163158. <div>31</div> 163159 AND UP.				

Figure 1. Material Index (Sheet 9)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y453.000 THROUGH Y488.000

EFFECTIVITY: 161353 THRU 161741

Reference Material

Fuel System A1-F18AC-460-300
No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.1. **DAMAGE EVALUATION.** See figure 1.

2. The figure identifies types of material used. Data shown can be used to analyze damage.

5. **REPLACEMENT.**

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).

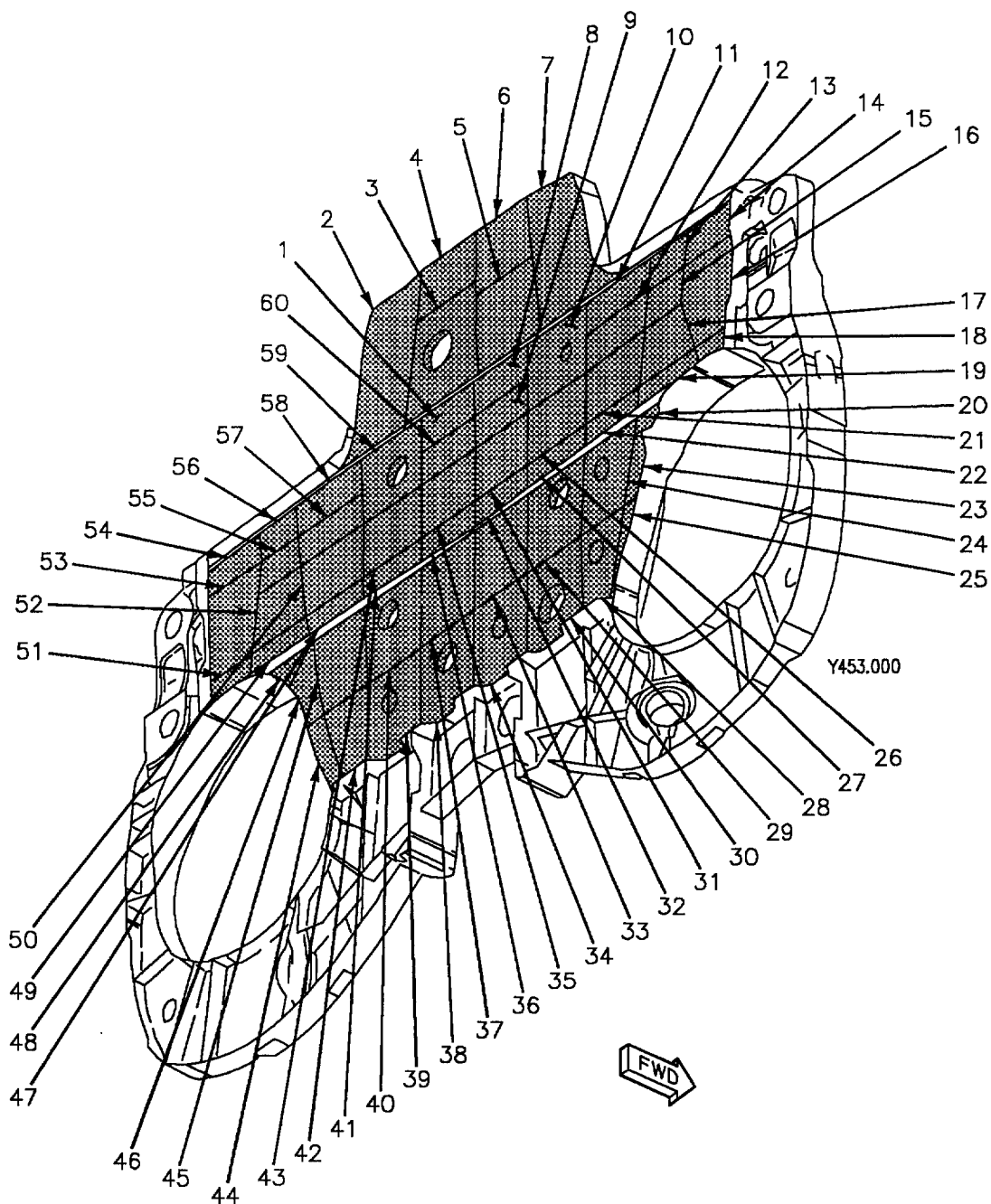


Figure 1. Material Index (Sheet 1)

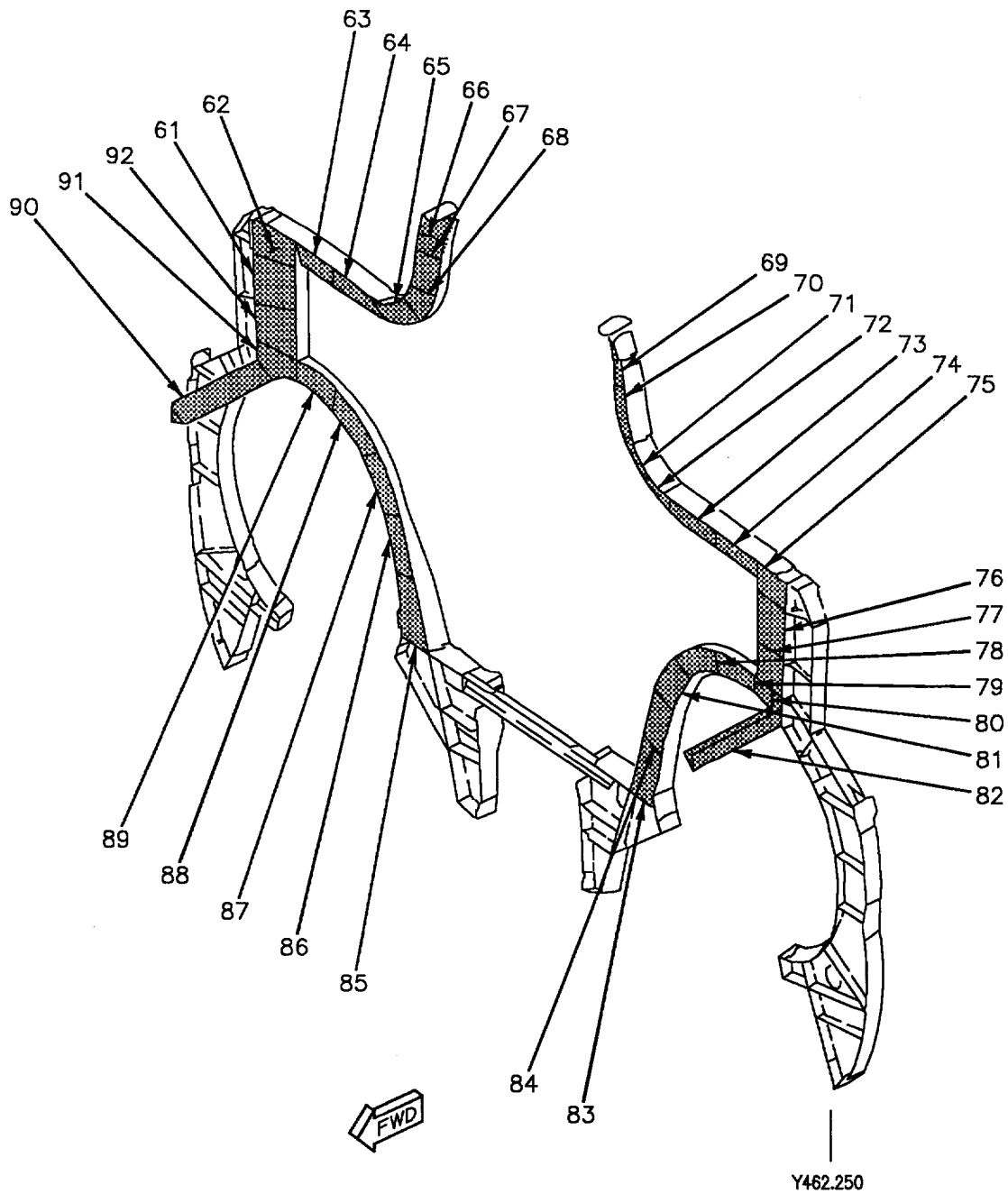


Figure 1. Material Index (Sheet 2)

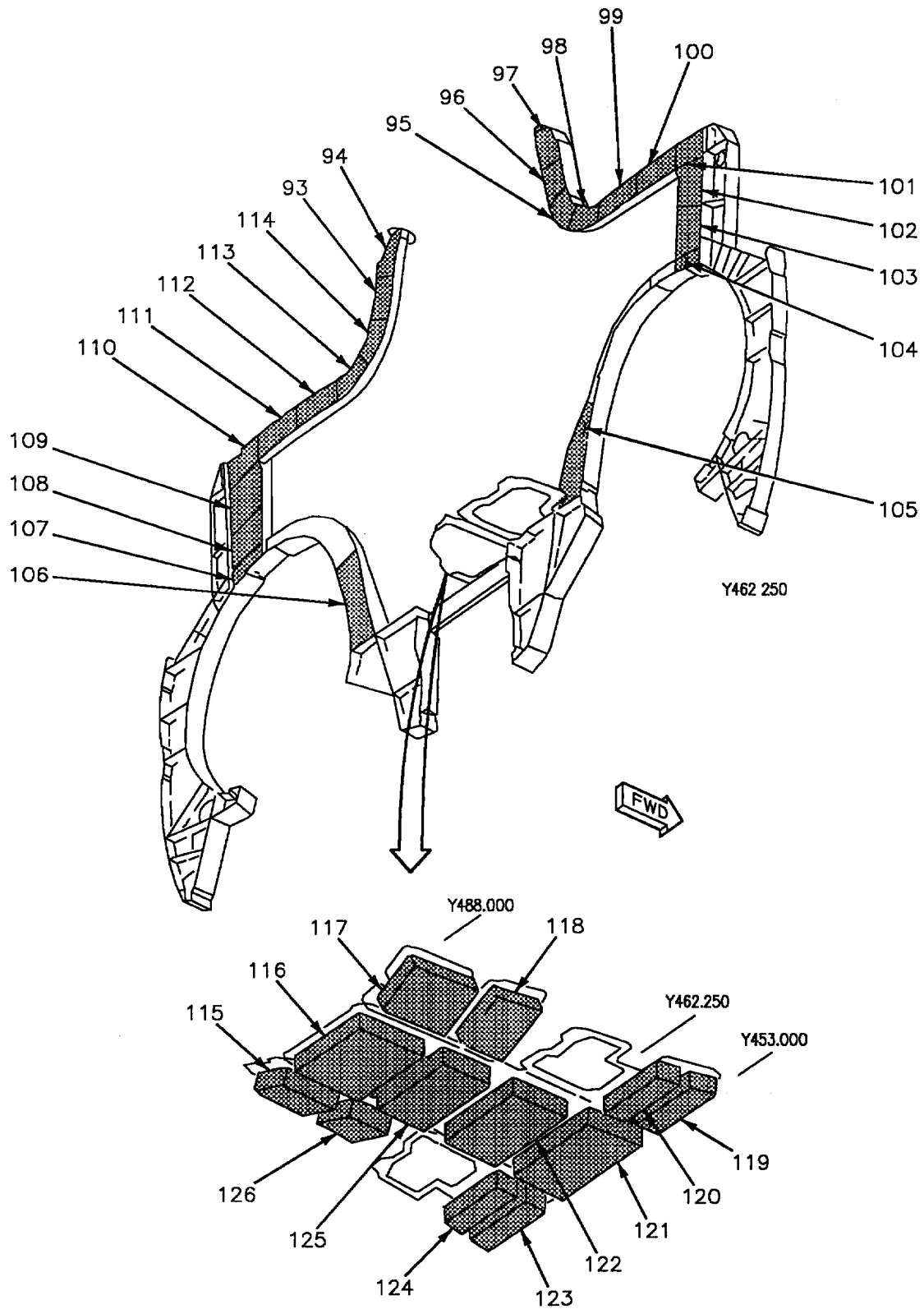


Figure 1. Material Index (Sheet 3)

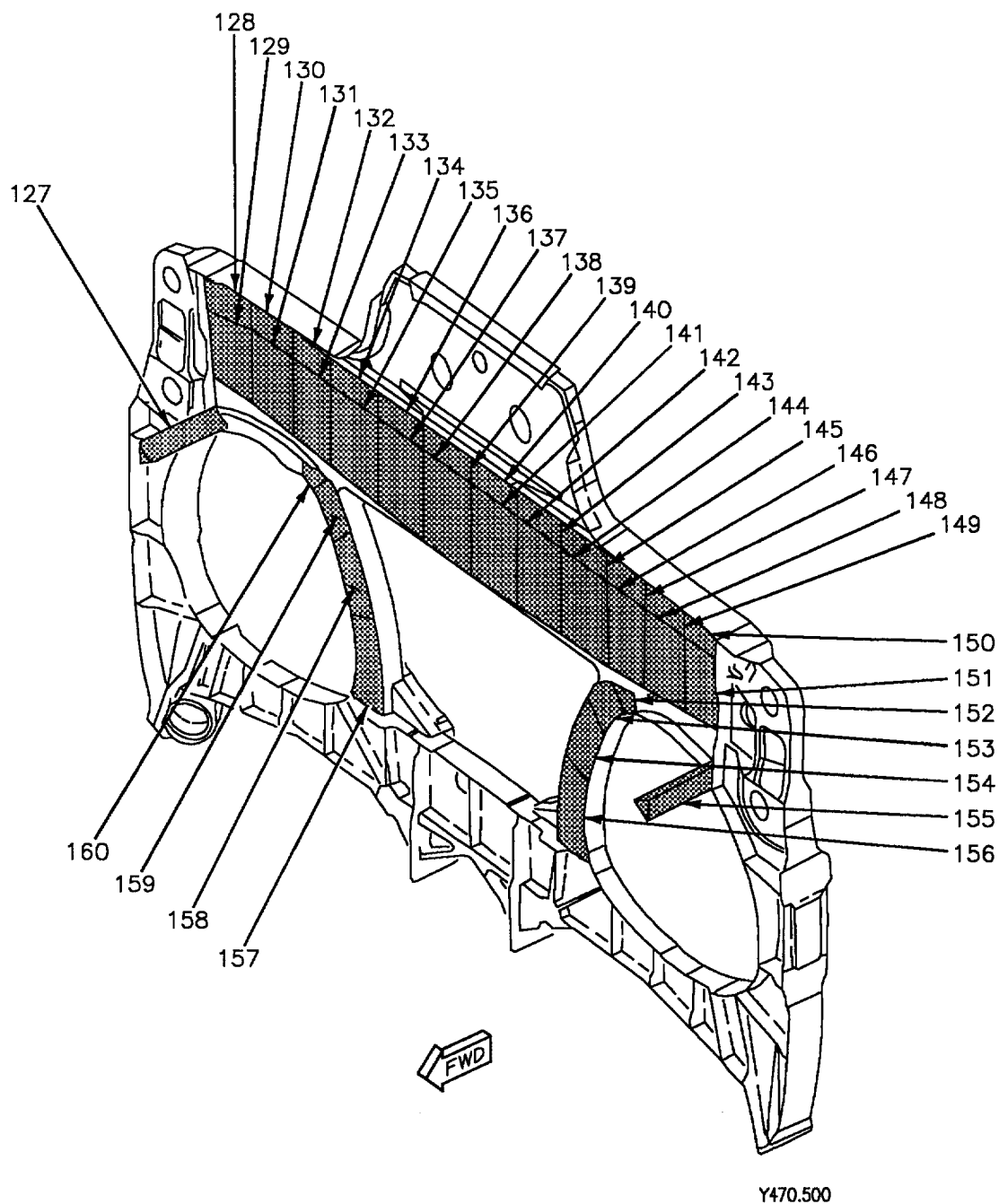


Figure 1. Material Index (Sheet 4)

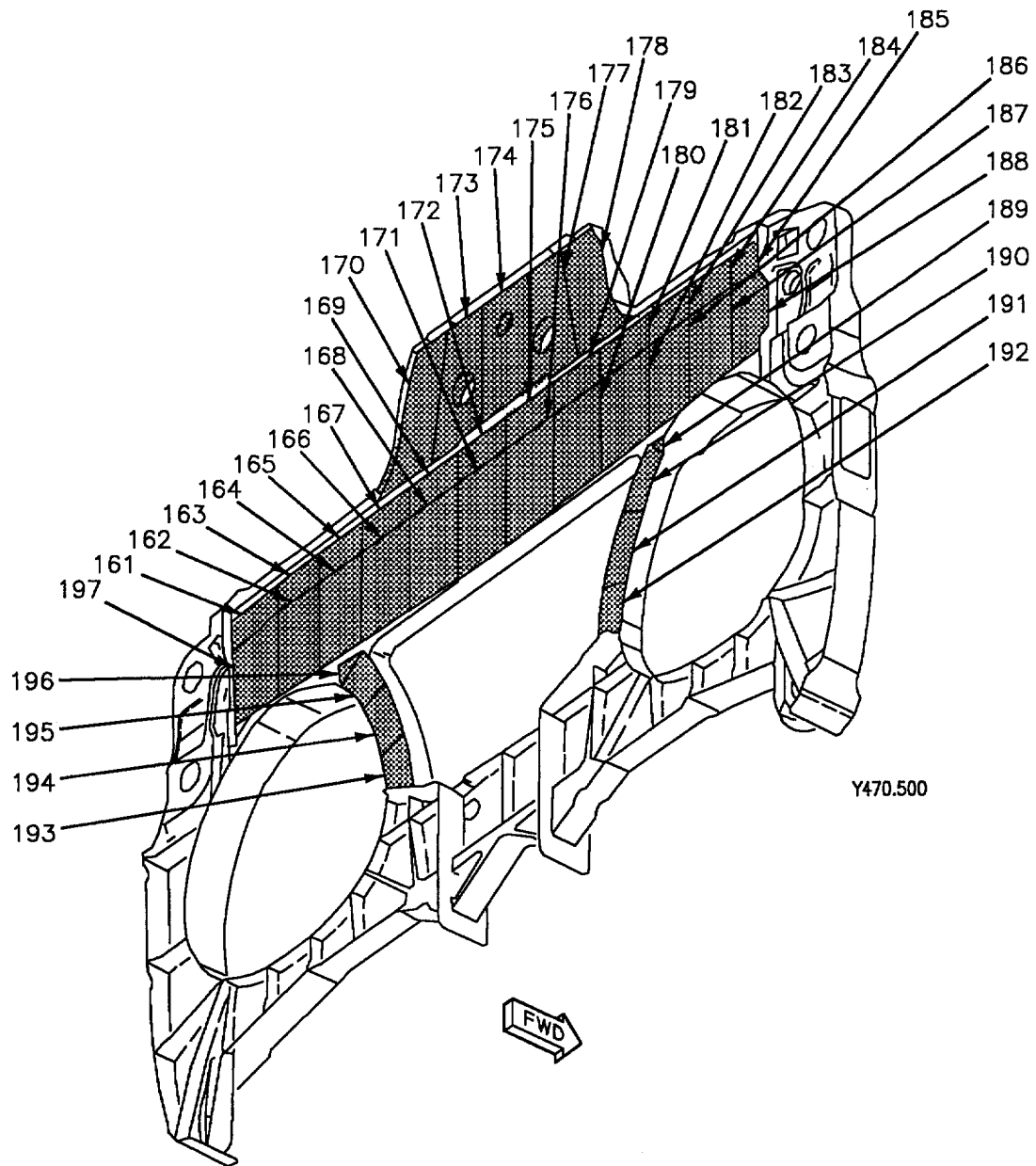


Figure 1. Material Index (Sheet 5)

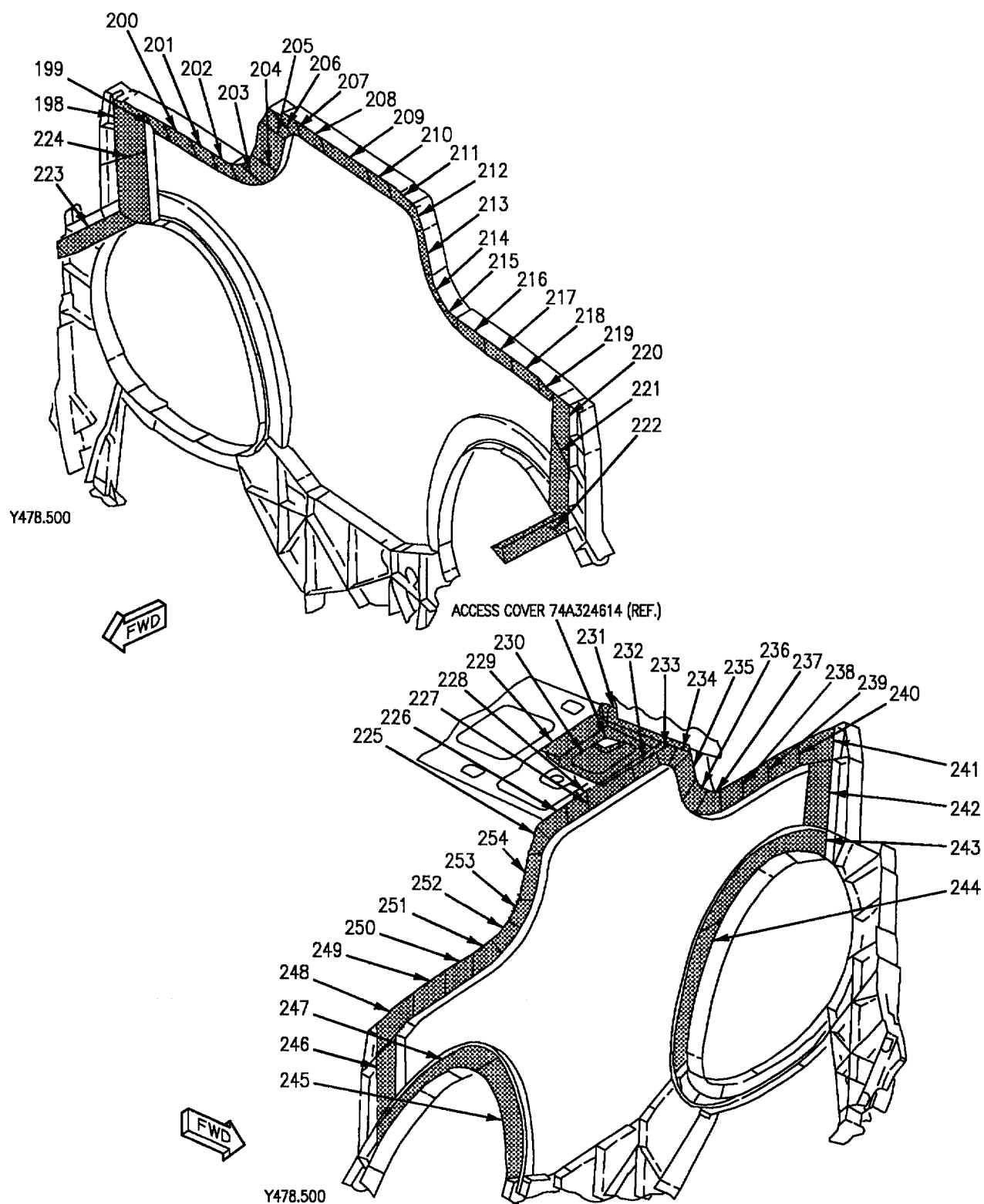


Figure 1. Material Index (Sheet 6)

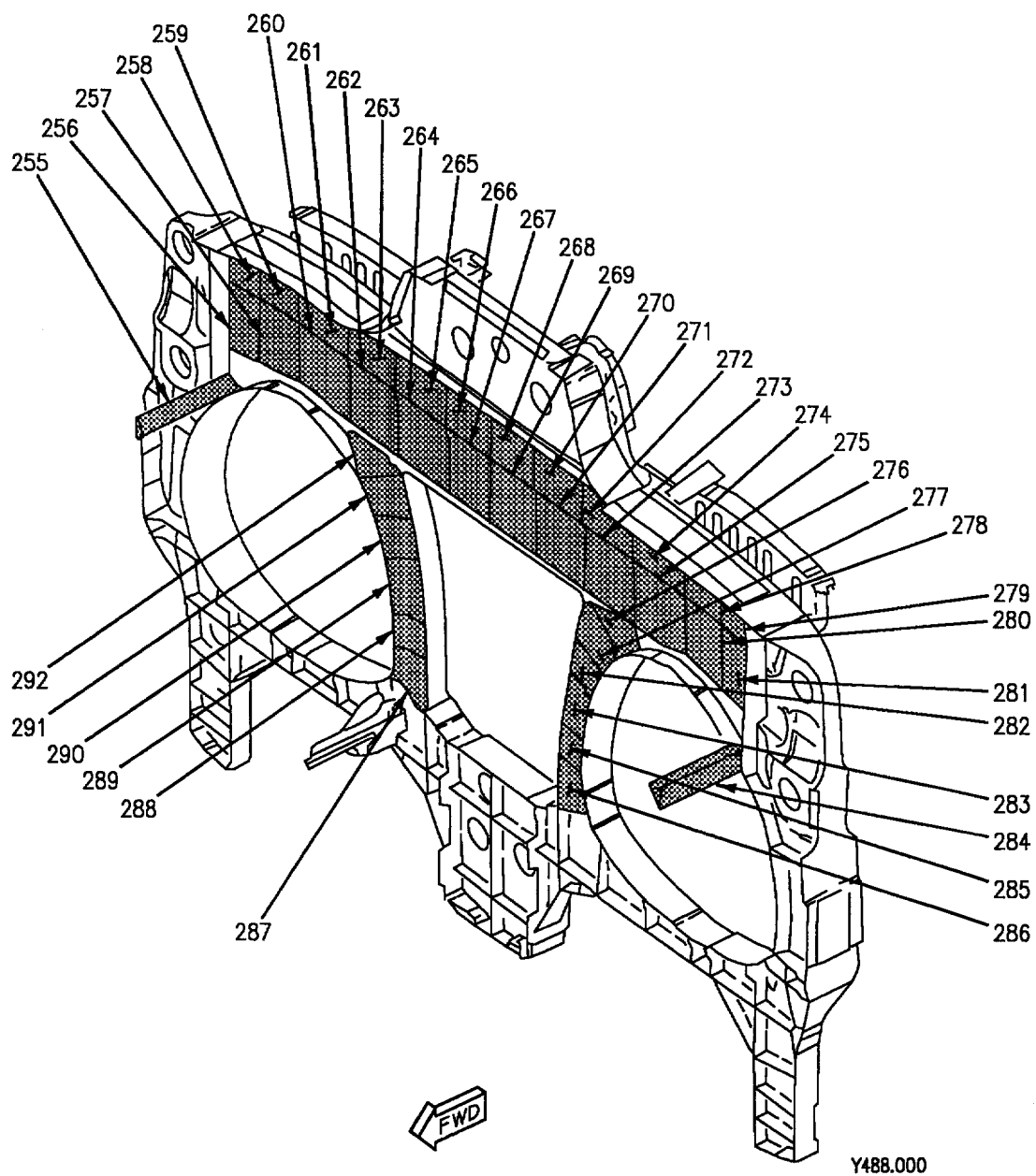


Figure 1. Material Index (Sheet 7)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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2		Filler (Foam) 74A586400-2931		<input type="checkbox"/> 1 <input type="checkbox"/> 2
3		Filler (Foam) 74A586400-2367	0.60 X 9.50 X 9.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
4		Filler (Foam) 74A586400-2937		<input type="checkbox"/> 1 <input type="checkbox"/> 2
5		Filler (Foam) 74A586400-2363	0.60 X 8.35 X 9.95	<input type="checkbox"/> 1 <input type="checkbox"/> 2
6		Filler (Foam) 74A586400-2941		<input type="checkbox"/> 1 <input type="checkbox"/> 2
7		Filler (Foam) 74A586400-2361	0.90 X 13.10 X 14.40	<input type="checkbox"/> 1 <input type="checkbox"/> 2
8		Filler (Foam) 74A586400-2939		<input type="checkbox"/> 1 <input type="checkbox"/> 2
9		Filler (Foam) 74A586400-2935		<input type="checkbox"/> 1 <input type="checkbox"/> 2
10		Filler (Foam) 74A586400-2357	1.20 X 7.25 X 7.95	<input type="checkbox"/> 1 <input type="checkbox"/> 2
11		Filler (Foam) 74A586400-2909		<input type="checkbox"/> 1 <input type="checkbox"/> 2
12		Filler (Foam) 74A586400-2351	1.00 X 3.55 X 8.10	<input type="checkbox"/> 1 <input type="checkbox"/> 2
13		Filler (Foam) 74A586400-2945		<input type="checkbox"/> 1 <input type="checkbox"/> 2
14		Filler (Foam) 74A586400-2951		<input type="checkbox"/> 1 <input type="checkbox"/> 2
15		Filler (Foam) 74A586400-2947		<input type="checkbox"/> 1 <input type="checkbox"/> 2
16		Filler (Foam) 74A586400-2953		<input type="checkbox"/> 1 <input type="checkbox"/> 2
17		Filler (Foam) 74A586400-2949		<input type="checkbox"/> 1 <input type="checkbox"/> 2
18		Filler (Foam) 74A586400-2339	1.00 X 2.10 X 5.40	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 8)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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20		Filler (Foam) 74A586400-2337	1.00 X 2.70 X 2.70	<input type="text" value="1"/> <input type="text" value="2"/>
21		Filler (Foam) 74A586400-2347	1.00 X 5.35 X 7.65	<input type="text" value="1"/> <input type="text" value="2"/>
22		Filler (Foam) 74A586400-2343	1.00 X 2.25 X 7.00	<input type="text" value="1"/> <input type="text" value="2"/>
23		Filler (Foam) 74A586400-2335	1.10 X 3.65 X 8.30	<input type="text" value="1"/> <input type="text" value="2"/>
24		Filler (Foam) 74A586400-2333	1.10 X 6.80 X 8.60	<input type="text" value="1"/> <input type="text" value="2"/>
25		Filler (Foam) 74A586400-2331	1.65 X 9.45 X 1.00	<input type="text" value="1"/> <input type="text" value="2"/>
26		Filler (Foam) 74A586400-2943		<input type="text" value="1"/> <input type="text" value="2"/>
27		Filler (Foam) 74A586400-2345	1.00 X 2.50 X 7.70	<input type="text" value="1"/> <input type="text" value="2"/>
28		Filler (Foam) 74A586400-2329	1.10 X 5.95 X 8.50	<input type="text" value="1"/> <input type="text" value="2"/>
29		Filler (Foam) 74A586400-2327	1.00 X 7.80 X 8.35	<input type="text" value="1"/> <input type="text" value="2"/>
30		Filler (Foam) 74A586400-2325	1.00 X 7.10 X 8.60	<input type="text" value="1"/> <input type="text" value="2"/>
31		Filler (Foam) 74A586400-2359	1.00 X 5.15 X 7.20	<input type="text" value="1"/> <input type="text" value="2"/>
32		Filler (Foam) 74A586400-2349	1.00 X 2.75 X 7.25	<input type="text" value="1"/> <input type="text" value="2"/>
33		Filler (Foam) 74A586400-2323	1.00 X 7.20 X 8.40	<input type="text" value="1"/> <input type="text" value="2"/>
34		Filler (Foam) 74A586400-2321	1.10 X 7.15 X 8.25	<input type="text" value="1"/> <input type="text" value="2"/>
35		Filler (Foam) 74A586400-2927		<input type="text" value="1"/> <input type="text" value="2"/>
36		Filler (Foam) 74A586400-2405	1.00 X 2.75 X 7.25	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 9)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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38		Filler (Foam) 74A586400-2411	1.00 X 5.35 X 8.55	<input type="text" value="1"/> <input type="text" value="2"/>
39		Filler (Foam) 74A586400-2407	1.15 X 6.95 X 8.65	<input type="text" value="1"/> <input type="text" value="2"/>
40		Filler (Foam) 74A586400-2399	1.00 X 7.80 X 8.35	<input type="text" value="1"/> <input type="text" value="2"/>
41		Filler (Foam) 74A586400-2383	1.00 X 2.50 X 7.70	<input type="text" value="1"/> <input type="text" value="2"/>
42		Filler (Foam) 74A586400-2403	1.00 X 5.45 X 8.55	<input type="text" value="1"/> <input type="text" value="2"/>
43		Filler (Foam) 74A586400-2925		<input type="text" value="1"/> <input type="text" value="2"/>
44		Filler (Foam) 74A586400-2401	1.00 X 1.65 X 9.45	<input type="text" value="1"/> <input type="text" value="2"/>
45		Filler (Foam) 74A586400-2397	1.15 X 6.35 X 8.90	<input type="text" value="1"/> <input type="text" value="2"/>
46		Filler (Foam) 74A586400-2395	1.10 X 3.65 X 8.30	<input type="text" value="1"/> <input type="text" value="2"/>
47		Filler (Foam) 74A586400-2387	1.00 X 2.25 X 7.00	<input type="text" value="1"/> <input type="text" value="2"/>
48		Filler (Foam) 74A586400-2393	1.00 X 2.70 X 2.70	<input type="text" value="1"/> <input type="text" value="2"/>
49		Filler (Foam) 74A586400-2389	1.00 X 2.50 X 7.35	<input type="text" value="1"/> <input type="text" value="2"/>
50		Filler (Foam) 74A586400-2385	1.00 X 5.35 X 7.65	<input type="text" value="1"/> <input type="text" value="2"/>
51		Filler (Foam) 74A586400-2391	1.00 X 2.10 X 5.40	<input type="text" value="1"/> <input type="text" value="2"/>
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Figure 1. Material Index (Sheet 10)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
55		Filler (Foam) 74A586400-2921		 
56		Filler (Foam) 74A586400-2923		 
57		Filler (Foam) 74A586400-2381	1.00 X 3.55 X 8.10	 
58		Filler (Foam) 74A586400-2377	1.00 X 3.70 X 8.35	 
59		Filler (Foam) 74A586400-2375	1.15 X 7.05 X 8.15	 
60		Filler (Foam) 74A586400-2929		 
61		Filler (Foam) 74A586400-2569	1.00 X 4.90 X 5.75	 
62		Filler (Foam) 74A586400-2567	0.80 X 2.75 X 4.85	 
63		Filler (Foam) 74A586400-2565	1.00 X 2.75 X 5.85	 
64		Filler (Foam) 74A586400-2563		 
65		Filler (Foam) 74A586400-2561		 
66		Filler (Foam) 74A586400-2555	0.70 X 3.25 X 6.55	 
67		Filler (Foam) 74A586400-2557	0.70 X 2.70 X 3.85	 
68		Filler (Foam) 74A586400-2559	1.00 X 3.15 X 4.90	 
69		Filler (Foam) 74A586400-2553	0.70 X 3.25 X 6.55	 
70		Filler (Foam) 74A586400-2551	0.75 X 2.65 X 3.80	 
71		Filler (Foam) 74A586400-2549	1.00 X 3.15 X 4.90	 
72		Filler (Foam) 74A586400-2547		 

Figure 1. Material Index (Sheet 11)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
73		Filler (Foam) 74A586400-2545		<input type="checkbox"/> 1 <input type="checkbox"/> 2
74		Filler (Foam) 74A586400-2543	0.90 X 2.65 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
75		Filler (Foam) 74A586400-2541	0.80 X 2.75 X 4.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
76		Filler (Foam) 74A586400-2539	1.00 X 4.90 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
77		Filler (Foam) 74A586400-2537	1.00 X 4.75 X 4.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
78		Filler (Foam) 74A586400-2531	0.90 X 3.85 X 6.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
79		Filler (Foam) 74A586400-2533	0.90 X 2.85 X 5.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
80		Filler (Foam) 74A586400-2535	0.90 X 3.95 X 4.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
81		Filler (Foam) 74A586400-2529	1.00 X 2.95 X 5.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
82	<input type="checkbox"/> 6	Filler (Foam) 74A586400-2371	1.30 X 1.55 X 7.40	<input type="checkbox"/> 1 <input type="checkbox"/> 2
83		Filler (Foam) 74A586400-2525	1.00 X 5.05 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
84		Filler (Foam) 74A586400-2527	1.00 X 3.30 X 5.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
85		Filler (Foam) 74A586400-2583	1.00 X 5.05 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
86		Filler (Foam) 74A586400-2581	1.00 X 3.30 X 5.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
87		Filler (Foam) 74A586400-2579	1.00 X 2.85 X 5.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
88		Filler (Foam) 74A586400-2577	0.90 X 3.85 X 6.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
89		Filler (Foam) 74A586400-2575	0.90 X 2.85 X 5.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
90	<input type="checkbox"/> 6	Filler (Foam) 74A586400-2372	1.30 X 1.55 X 7.40	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 12)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
91		Filler (Foam) 74A586400-2573	0.90 X 3.95 X 4.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
92		Filler (Foam) 74A586400-2571	1.00 X 4.75 X 4.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
93		Filler (Foam) 74A586400-2161	0.90 X 3.05 X 4.20	<input type="checkbox"/> 1 <input type="checkbox"/> 2
94		Filler (Foam) 74A586400-2159	1.00 X 2.55 X 5.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
95		Filler (Foam) 74A586400-2151	1.00 X 3.50 X 4.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
96		Filler (Foam) 74A586400-2153	0.90 X 3.00 X 4.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
97		Filler (Foam) 74A586400-2155	1.00 X 2.50 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
98		Filler (Foam) 74A586400-2149	1.00 X 3.55 X 5.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
99		Filler (Foam) 74A586400-2147	0.80 X 2.75 X 6.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
100		Filler (Foam) 74A586400-2145	0.90 X 2.65 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
101		Filler (Foam) 74A586400-2143	0.90 X 2.60 X 4.60	<input type="checkbox"/> 1 <input type="checkbox"/> 2
102		Filler (Foam) 74A586400-2141	1.00 X 4.65 X 5.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
103		Filler (Foam) 74A586400-2139	1.00 X 5.00 X 5.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
104		Filler (Foam) 74A586400-2137	1.00 X 5.00 X 5.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
105		Filler (Foam) 74A586400-2157	1.00 X 3.35 X 6.95	<input type="checkbox"/> 1 <input type="checkbox"/> 2
106		Filler (Foam) 74A586400-2179	1.00 X 2.15 X 5.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
107		Filler (Foam) 74A586400-2177	1.00 X 2.50 X 4.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
108		Filler (Foam) 74A586400-2175	1.00 X 5.00 X 5.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 13)















































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110		Filler (Foam) 74A586400-2171	0.90 X 2.65 X 4.60	 
111		Filler (Foam) 74A586400-2169	0.90 X 2.60 X 5.80	 
112		Filler (Foam) 74A586400-2167	0.80 X 2.75 X 6.05	 
113		Filler (Foam) 74A586400-2165	1.00 X 3.60 X 5.05	 
114		Filler (Foam) 74A586400-2163	1.00 X 3.50 X 4.90	 
115	 	Filler (Foam) 74A585008-2033 74A585008-2087		 
116	 	Filler (Foam) 74A585008-2013 74A585008-2077		 
117	 	Filler (Foam) 74A585008-2034 74A585008-2089		 
118	 	Filler (Foam) 74A585008-2032 74A585008-2085		 
119	 	Filler (Foam) 74A585008-2028 74A585008-2083		 
120		Filler (Foam) 74A585008-2065		 
121	 	Filler (Foam) 74A585008-2007 74A585008-2071		 
122	 	Filler (Foam) 74A585008-2009 74A585008-2073		 
123	 	Filler (Foam) 74A585008-2027 74A585008-2081		 

Figure 1. Material Index (Sheet 14)







































Idx No.	Eft	Nomenclature and Part No.	Description	Material
124		Filler (Foam) 74A585008-2051		 
125	 	Filler (Foam) 74A585008-2011 74A585008-2075		 
126		Filler (Foam) 74A585008-2031		 
127		Filler (Foam) 74A586400-2370	1.60 X 2.35 X 7.25	 
128		Filler (Foam) 74A586400-2303	0.90 X 3.05 X 6.45	 
129		Filler (Foam) 74A586400-2305	0.90 X 6.05 X 8.20	 
130		Filler (Foam) 74A586400-2301	1.00 X 2.95 X 5.20	 
131		Filler (Foam) 74A586400-2307	1.00 X 5.40 X 8.35	 
132		Filler (Foam) 74A586400-2299	0.90 X 3.15 X 5.25	 
133		Filler (Foam) 74A586400-2309	0.90 X 5.40 X 8.75	 
134		Filler (Foam) 74A586400-2295	0.90 X 3.10 X 6.30	 
135		Filler (Foam) 74A586400-2297	1.00 X 6.35 X 9.05	 
136		Filler (Foam) 74A586400-2291	0.90 X 3.15 X 6.25	 
137		Filler (Foam) 74A586400-2293	0.90 X 6.50 X 9.15	 
138		Filler (Foam) 74A586400-2289	0.90 X 6.35 X 9.35	 
139		Filler (Foam) 74A586400-2287	0.90 X 3.35 X 6.35	 
140		Filler (Foam) 74A586400-2285	0.90 X 3.35 X 6.35	 
141		Filler (Foam) 74A586400-2283	0.90 X 6.35 X 9.35	 

Figure 1. Material Index (Sheet 15)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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143		Filler (Foam) 74A586400-2281	0.90 X 3.15 X 6.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
144		Filler (Foam) 74A586400-2275	1.00 X 6.35 X 8.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
145		Filler (Foam) 74A586400-2279	0.90 X 3.10 X 6.30	<input type="checkbox"/> 1 <input type="checkbox"/> 2
146		Filler (Foam) 74A586400-2263	0.90 X 5.40 X 8.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
147		Filler (Foam) 74A586400-2273	0.90 X 3.15 X 5.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
148		Filler (Foam) 74A586400-2265	1.00 X 5.40 X 8.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
149		Filler (Foam) 74A586400-2271	1.00 X 2.95 X 5.20	<input type="checkbox"/> 1 <input type="checkbox"/> 2
150		Filler (Foam) 74A586400-2269	0.90 X 3.05 X 6.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
151		Filler (Foam) 74A586400-2267	0.90 X 6.05 X 8.20	<input type="checkbox"/> 1 <input type="checkbox"/> 2
152		Filler (Foam) 74A586400-2261	0.90 X 2.15 X 3.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
153		Filler (Foam) 74A586400-2259	3.85 X 6.15 X 0.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
154		Filler (Foam) 74A586400-2257	4.05 X 6.70 X 0.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
155		Filler (Foam) 74A586400-2369	1.60 X 2.35 X 7.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
156		Filler (Foam) 74A586400-2907	1.00 X 2.25 X 6.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
157		Filler (Foam) 74A586400-2905	1.00 X 2.25 X 6.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
158		Filler (Foam) 74A586400-2315	0.90 X 4.05 X 6.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
159		Filler (Foam) 74A586400-2313	0.90 X 3.85 X 6.15	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 16)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
160		Filler (Foam) 74A586400-2311	0.90 X 2.15 X 3.25	 
161		Filler (Foam) 74A586400-2117	0.80 X 3.25 X 6.35	 
162		Filler (Foam) 74A586400-2125	0.90 X 5.55 X 8.35	 
163		Filler (Foam) 74A586400-2119	0.90 X 3.15 X 5.35	 
164		Filler (Foam) 74A586400-2127	0.90 X 5.25 X 8.70	 
165		Filler (Foam) 74A586400-2121	0.90 X 3.05 X 5.25	 
166		Filler (Foam) 74A586400-2115	0.90 X 6.35 X 8.95	 
167		Filler (Foam) 74A586400-2113	0.85 X 3.15 X 6.35	 
168		Filler (Foam) 74A586400-2111	0.90 X 6.70 X 9.10	 
169		Filler (Foam) 74A586400-2109	0.90 X 3.15 X 6.45	 
170		Filler (Foam) 74A586400-2103	0.85 X 7.35 X 13.75	 
171		Filler (Foam) 74A586400-2107	0.85 X 6.50 X 9.25	 
172		Filler (Foam) 74A586400-2105	0.85 X 3.35 X 6.35	 
173		Filler (Foam) 74A586400-2101	0.95 X 6.85 X 12.15	 
174		Filler (Foam) 74A586400-2099	0.80 X 5.95 X 11.80	 
175		Filler (Foam) 74A586400-2093	0.90 X 3.35 X 6.40	 
176		Filler (Foam) 74A586400-2091	0.85 X 6.50 X 9.25	 
177		Filler (Foam) 74A586400-2097	0.85 X 6.95 X 12.20	 

Figure 1. Material Index (Sheet 17)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
178		Filler (Foam) 74A586400-2095	0.85 X 7.35 X 13.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
179		Filler (Foam) 74A586400-2089	0.90 X 3.10 X 6.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
180		Filler (Foam) 74A586400-2087	0.90 X 6.70 X 9.10	<input type="checkbox"/> 1 <input type="checkbox"/> 2
181		Filler (Foam) 74A586400-2085	0.85 X 3.15 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
182		Filler (Foam) 74A586400-2081	0.90 X 6.65 X 9.15	<input type="checkbox"/> 1 <input type="checkbox"/> 2
183		Filler (Foam) 74A586400-2083	0.90 X 3.05 X 5.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
184		Filler (Foam) 74A586400-2079	0.90 X 3.15 X 5.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
185		Filler (Foam) 74A586400-2077	0.80 X 3.25 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
186		Filler (Foam) 74A586400-2071	0.90 X 5.25 X 8.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
187		Filler (Foam) 74A586400-2073	0.90 X 5.55 X 8.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
188		Filler (Foam) 74A586400-2075	0.75 X 6.25 X 8.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
189		Filler (Foam) 74A586400-2069	1.00 X 1.65 X 2.60	<input type="checkbox"/> 1 <input type="checkbox"/> 2
190		Filler (Foam) 74A586400-2067	1.00 X 3.40 X 7.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
191		Filler (Foam) 74A586400-2065	1.10 X 2.85 X 6.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
192		Filler (Foam) 74A586400-2063	1.05 X 3.75 X 6.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
193		Filler (Foam) 74A586400-2135	1.00 X 2.75 X 6.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
194		Filler (Foam) 74A586400-2133	1.10 X 2.85 X 6.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
195		Filler (Foam) 74A586400-2131	1.00 X 3.40 X 7.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 18)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
196		Filler (Foam) 74A586400-2129	1.00 X 1.65 X 2.60	<input type="text" value="1"/> <input type="text" value="2"/>
197		Filler (Foam) 74A586400-2123	0.75 X 6.25 X 8.45	<input type="text" value="1"/> <input type="text" value="2"/>
198		Filler (Foam) 74A586400-2897		<input type="text" value="1"/> <input type="text" value="2"/>
199		Filler (Foam) 74A586400-2517	0.90 X 3.05 X 9.10	<input type="text" value="1"/> <input type="text" value="2"/>
200		Filler (Foam) 74A586400-2515	0.80 X 2.75 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
201		Filler (Foam) 74A586400-2513	0.80 X 2.55 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
202		Filler (Foam) 74A586400-2511	0.70 X 2.75 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
203		Filler (Foam) 74A586400-2509	0.90 X 2.75 X 3.75	<input type="text" value="1"/> <input type="text" value="2"/>
204		Filler (Foam) 74A586400-2507	0.90 X 2.75 X 3.75	<input type="text" value="1"/> <input type="text" value="2"/>
205		Filler (Foam) 74A586400-2505	1.00 X 2.85 X 5.05	<input type="text" value="1"/> <input type="text" value="2"/>
206		Filler (Foam) 74A586400-2503	0.80 X 3.20 X 3.70	<input type="text" value="1"/> <input type="text" value="2"/>
207		Filler (Foam) 74A586400-2501	0.90 X 2.95 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
208		Filler (Foam) 74A586400-2499	0.70 X 2.95 X 4.15	<input type="text" value="1"/> <input type="text" value="2"/>
209		Filler (Foam) 74A586400-2497	0.80 X 2.75 X 7.75	<input type="text" value="1"/> <input type="text" value="2"/>
210		Filler (Foam) 74A586400-2495	0.70 X 2.95 X 4.15	<input type="text" value="1"/> <input type="text" value="2"/>
211		Filler (Foam) 74A586400-2493	0.90 X 2.95 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
212		Filler (Foam) 74A586400-2491	0.80 X 3.20 X 3.70	<input type="text" value="1"/> <input type="text" value="2"/>
213		Filler (Foam) 74A586400-2489	1.00 X 2.85 X 5.05	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 19)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
214		Filler (Foam) 74A586400-2487	0.90 X 2.75 X 3.75	<input type="text" value="1"/> <input type="text" value="2"/>
215		Filler (Foam) 74A586400-2485	0.90 X 2.75 X 3.75	<input type="text" value="1"/> <input type="text" value="2"/>
216		Filler (Foam) 74A586400-2483	0.70 X 2.75 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
217		Filler (Foam) 74A586400-2481	0.80 X 2.55 X 4.60	<input type="text" value="1"/> <input type="text" value="2"/>
218		Filler (Foam) 74A586400-2479	0.80 X 2.75 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
219		Filler (Foam) 74A586400-2477	0.80 X 2.70 X 3.35	<input type="text" value="1"/> <input type="text" value="2"/>
220		Filler (Foam) 74A586400-2899		<input type="text" value="1"/> <input type="text" value="2"/>
221		Filler (Foam) 74A586400-2903		<input type="text" value="1"/> <input type="text" value="2"/>
222		Filler (Foam) 74A586400-2365	2.00 X 2.30 X 7.25	<input type="text" value="1"/> <input type="text" value="2"/>
223		Filler (Foam) 74A586400-2366	2.00 X 2.30 X 7.25	<input type="text" value="1"/> <input type="text" value="2"/>
224		Filler (Foam) 74A586400-2901		<input type="text" value="1"/> <input type="text" value="2"/>
225		Filler (Foam) 74A586400-2447	0.95 X 3.05 X 3.75	<input type="text" value="1"/> <input type="text" value="2"/>
226		Filler (Foam) 74A586400-2445	0.95 X 3.25 X 4.75	<input type="text" value="1"/> <input type="text" value="2"/>
227		Filler (Foam) 74A586400-2439		<input type="text" value="1"/> <input type="text" value="2"/>
228		Filler (Foam) 74A586400-2443	0.95 X 2.65 X 4.05	<input type="text" value="1"/> <input type="text" value="2"/>
229		Filler (Foam) 74A586400-2959	1.00 X 2.38 X 9.00	<input type="text" value="1"/> <input type="text" value="2"/>
230		Filler (Foam) 74A586400-2955	1.00 X 9.25 X 10.25	<input type="text" value="1"/> <input type="text" value="2"/>
231		Filler (Foam) 74A586400-2957	1.00 X 4.00 X 6.00	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 20)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
232		Filler (Foam) 74A586400-2437	0.95 X 2.65 X 4.05	 
233		Filler (Foam) 74A586400-2435	0.95 X 3.25 X 4.75	 
234		Filler (Foam) 74A586400-2433	0.95 X 3.05 X 3.75	 
235		Filler (Foam) 74A586400-2431	0.90 X 2.65 X 4.85	 
236		Filler (Foam) 74A586400-2429	1.00 X 2.55 X 3.50	 
237		Filler (Foam) 74A586400-2427	1.00 X 2.55 X 3.50	 
238		Filler (Foam) 74A586400-2425	0.90 X 2.55 X 4.65	 
239		Filler (Foam) 74A586400-2423	0.85 X 2.65 X 4.65	 
240		Filler (Foam) 74A586400-2421	0.90 X 2.65 X 4.50	 
241		Filler (Foam) 74A586400-2419	1.00 X 3.55 X 6.15	 
242		Filler (Foam) 74A586400-2417	1.00 X 2.95 X 9.00	 
243		Filler (Foam) 74A586400-2415	1.00 X 2.25 X 23.50	 
244		Filler (Foam) 74A586400-2413	0.90 X 3.25 X 6.70	 
245		Filler (Foam) 74A586400-2467	0.90 X 2.15 X 13.15	 
246		Filler (Foam) 74A586400-2463	0.90 X 3.05 X 9.10	 
247		Filler (Foam) 74A586400-2465	1.00 X 2.25 X 23.50	 
248		Filler (Foam) 74A586400-2459	1.00 X 3.55 X 6.15	 
249		Filler (Foam) 74A586400-2461	0.90 X 2.65 X 4.50	 

Figure 1. Material Index (Sheet 21)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
250		Filler (Foam) 74A586400-2457	0.85 X 2.65 X 4.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
251		Filler (Foam) 74A586400-2455	0.90 X 2.55X 4.60	<input type="checkbox"/> 1 <input type="checkbox"/> 2
252		Filler (Foam) 74A586400-2453	1.00 X 2.55 X 3.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
253		Filler (Foam) 74A586400-2451	1.00 X 2.55 X 3.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
254		Filler (Foam) 74A586400-2449	0.90 X 2.65 X 4.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
255		Filler (Foam) 74A586400-2896	2.10 X 2.90 X 7.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
256		Filler (Foam) 74A586400-2237	1.00 X 5.00 X 7.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
257		Filler (Foam) 74A586400-2239	1.00 X 4.50 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
258		Filler (Foam) 74A586400-2235	1.25 X 4.25 X 5.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
259		Filler (Foam) 74A586400-2231	1.25 X 3.75 X 4.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
260		Filler (Foam) 74A586400-2233	1.00 X 3.13 X 6.38	<input type="checkbox"/> 1 <input type="checkbox"/> 2
261		Filler (Foam) 74A586400-2229	1.25 X 3.50 X 6.38	<input type="checkbox"/> 1 <input type="checkbox"/> 2
262		Filler (Foam) 74A586400-2227	1.00 X 6.13 X 6.63	<input type="checkbox"/> 1 <input type="checkbox"/> 2
263		Filler (Foam) 74A586400-2225	1.00 X 3.63 X 6.13	<input type="checkbox"/> 1 <input type="checkbox"/> 2
264		Filler (Foam) 74A586400-2223	1.00 X 6.38 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
265		Filler (Foam) 74A586400-2221	1.25 X 3.75 X 6.38	<input type="checkbox"/> 1 <input type="checkbox"/> 2
266		Filler (Foam) 74A586400-2217	1.25 X 3.75 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
267		Filler (Foam) 74A586400-2219	1.00 X 5.75 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 22)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
268		Filler (Foam) 74A586400-2215	1.25 X 3.75 X 5.75	<input type="text" value="1"/> <input type="text" value="2"/>
269		Filler (Foam) 74A586400-2213	1.00 X 5.75 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
270		Filler (Foam) 74A586400-2211	1.25 X 3.75 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
271		Filler (Foam) 74A586400-2209	1.00 X 6.38 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
272		Filler (Foam) 74A586400-2207	1.25 X 3.63 X 6.13	<input type="text" value="1"/> <input type="text" value="2"/>
273		Filler (Foam) 74A586400-2205	1.00 X 6.13 X 6.63	<input type="text" value="1"/> <input type="text" value="2"/>
274		Filler (Foam) 74A586400-2203	1.25 X 3.50 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
275		Filler (Foam) 74A586400-2193	1.00 X 3.13 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
276		Filler (Foam) 74A586400-2191	1.00 X 3.13 X 5.25	<input type="text" value="1"/> <input type="text" value="2"/>
277		Filler (Foam) 74A586400-2189	1.00 X 4.25 X 4.75	<input type="text" value="1"/> <input type="text" value="2"/>
278		Filler (Foam) 74A586400-2201	1.25 X 3.75 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
279		Filler (Foam) 74A586400-2199	1.25 X 4.25 X 5.25	<input type="text" value="1"/> <input type="text" value="2"/>
280		Filler (Foam) 74A586400-2195	1.00 X 4.50 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
281		Filler (Foam) 74A586400-2197	1.00 X 5.00 X 7.00	<input type="text" value="1"/> <input type="text" value="2"/>
282		Filler (Foam) 74A586400-2187	1.00 X 3.50 X 4.00	<input type="text" value="1"/> <input type="text" value="2"/>
283		Filler (Foam) 74A586400-2185	1.00 X 3.00 X 4.75	<input type="text" value="1"/> <input type="text" value="2"/>
284		Filler (Foam) 74A586400-2895	2.10 X 2.90 X 7.75	<input type="text" value="1"/> <input type="text" value="2"/>
285		Filler (Foam) 74A586400-2183	1.00 X 2.88 X 3.50	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 23)





















Idx No.	Eft	Nomenclature and Part No.	Description	Material
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287		Filler (Foam) 74A586400-2251	1.00 X 3.63 X 4.75	 
288		Filler (Foam) 74A586400-2249	1.00 X 2.88 X 3.50	 
289		Filler (Foam) 74A586400-2247	1.00 X 3.00 X 4.75	 
290		Filler (Foam) 74A586400-2245	1.00 X 3.50 X 4.00	 
291		Filler (Foam) 74A586400-2243	1.00 X 4.25 X 4.75	 
292		Filler (Foam) 74A586400-2241	1.00 X 3.13 X 5.25	 
<p style="text-align: center;">LEGEND</p> <p> Make from PPP-C-1752, type 1, 2 pounds per cu. ft., class III.</p> <p> Bond foam using EC-847 adhesive - 3M Company, St. Paul, Minn. 04963.</p> <p> Make from basil laminated sandwich panel, 1.7 +0.001 -0.000 inches thick.</p> <p> 161353 THRU 161705, 161707.</p> <p> 161706, 161708 THRU 161741.</p> <p> 161353 THRU 161704.</p>				

Figure 1. Material Index (Sheet 24)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y453.000 THROUGH Y488.000

EFFECTIVITY: 161742 AND UP

Reference Material

Fuel System A1-F18AC-460-300
 No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

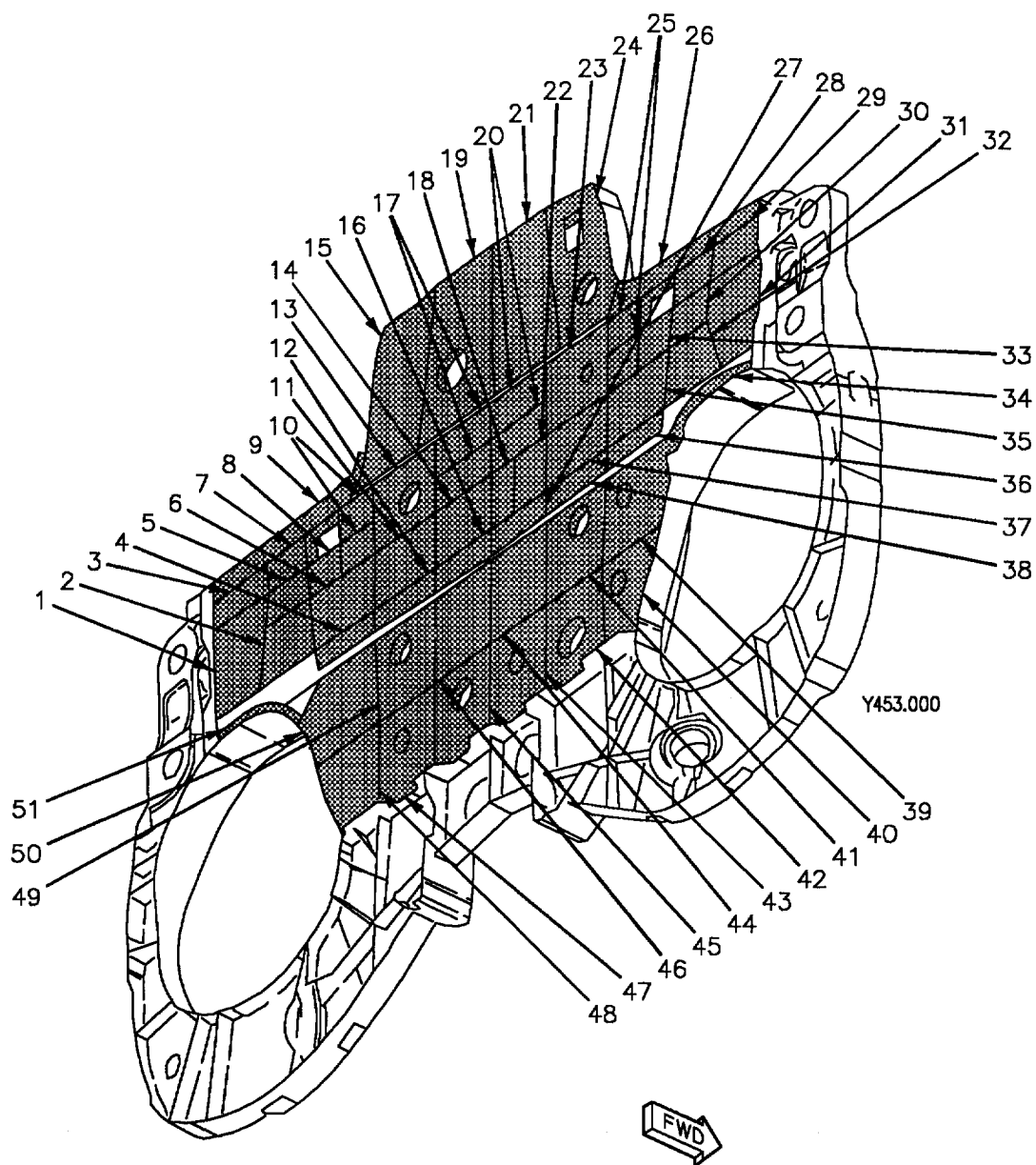
Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.1. **DAMAGE EVALUATION.** See figure 1.5. **REPLACEMENT.**

2. The figure identifies types of material used. Data shown can be used to analyze damage.

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).



24010101

Figure 1. Material Index (Sheet 1)

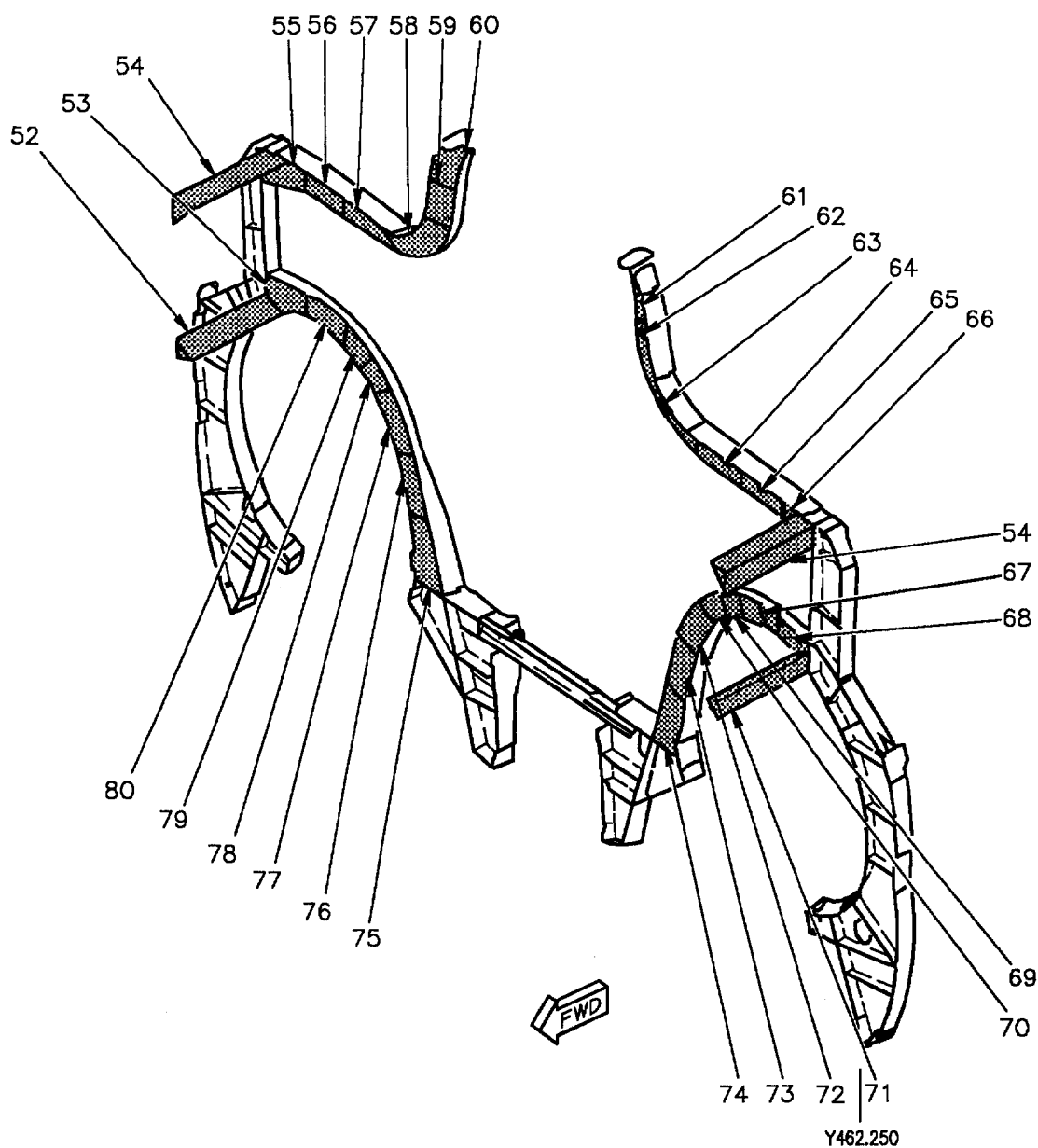


Figure 1. Material Index (Sheet 2)

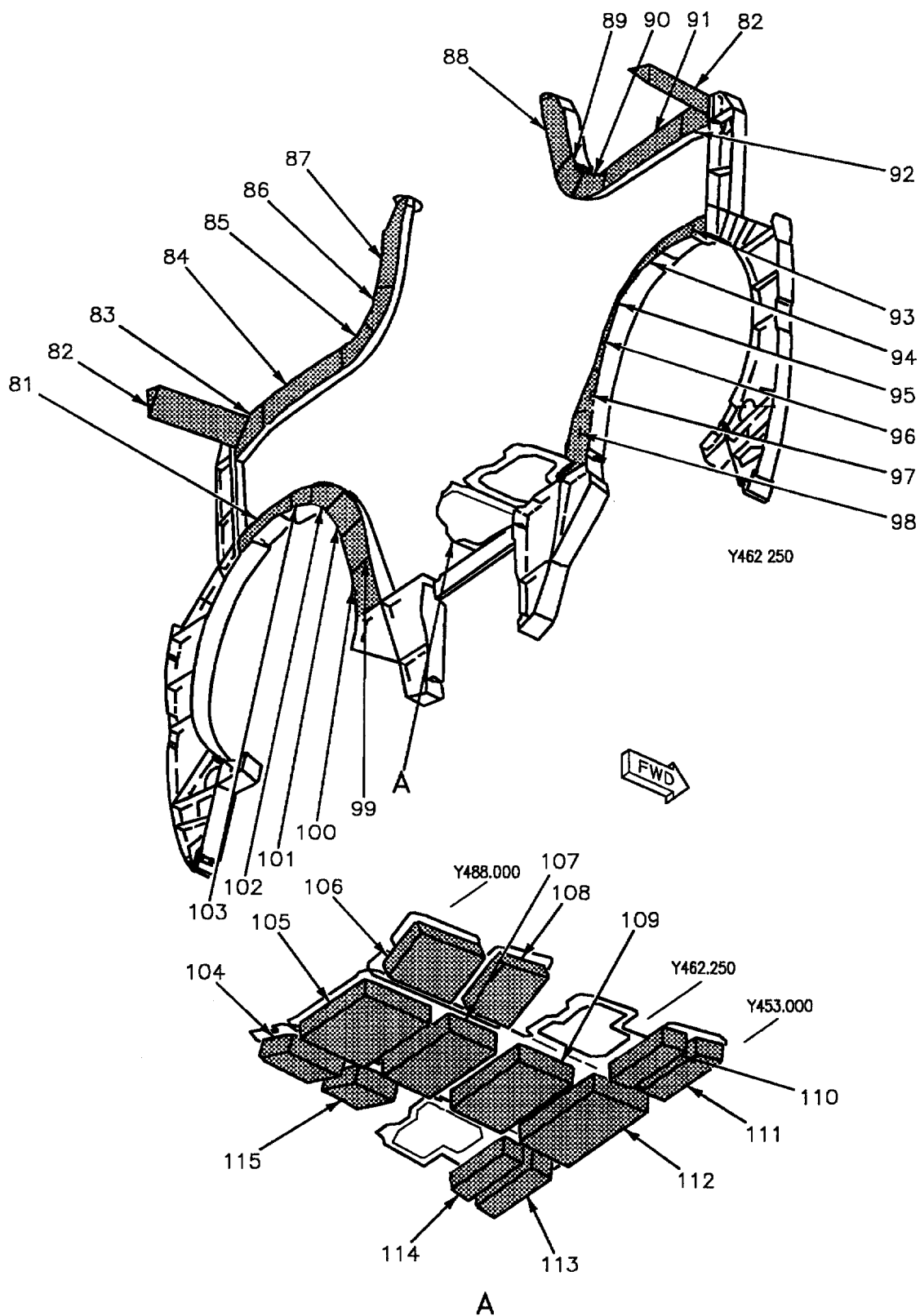


Figure 1. Material Index (Sheet 3)

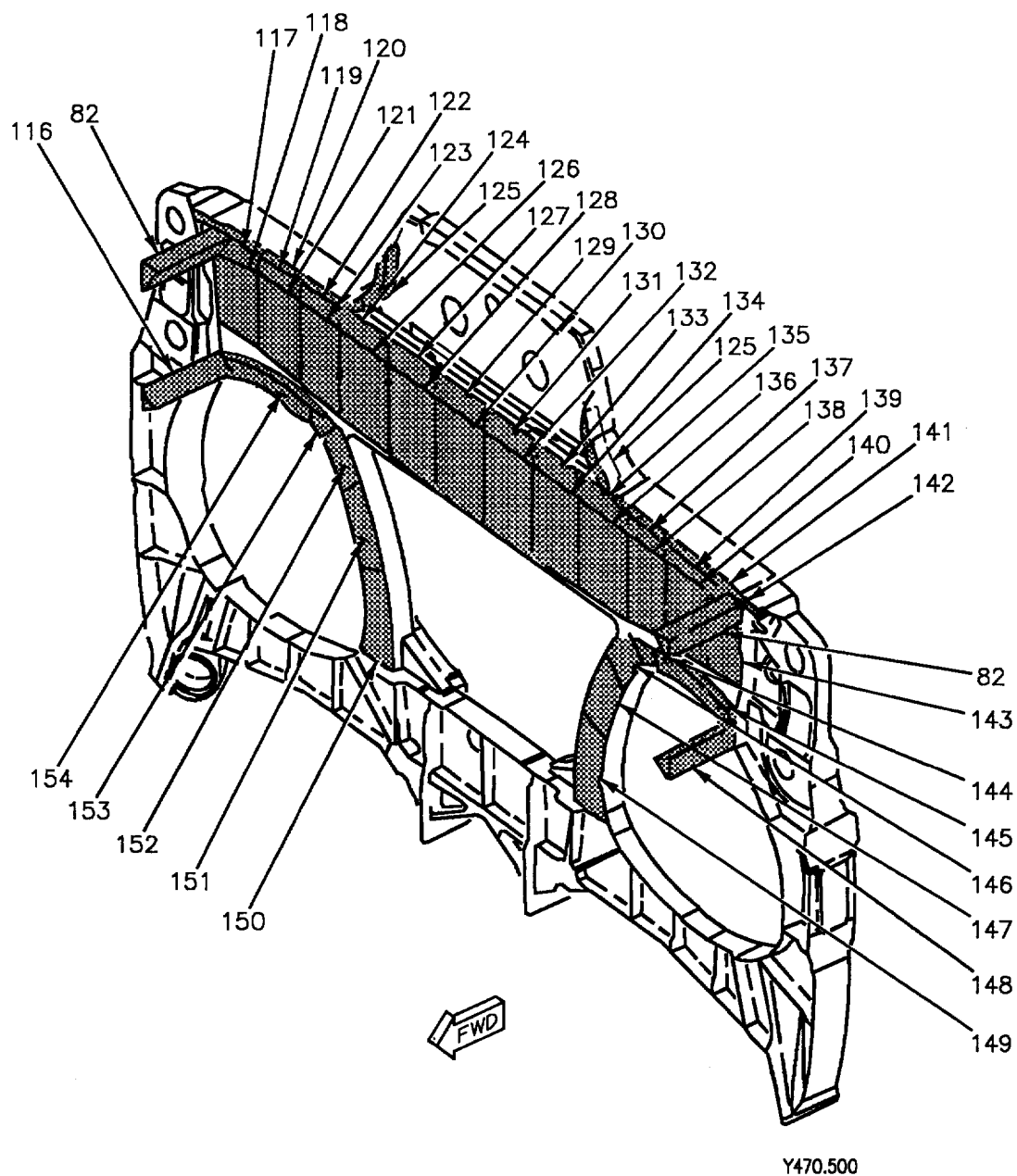


Figure 1. Material Index (Sheet 4)

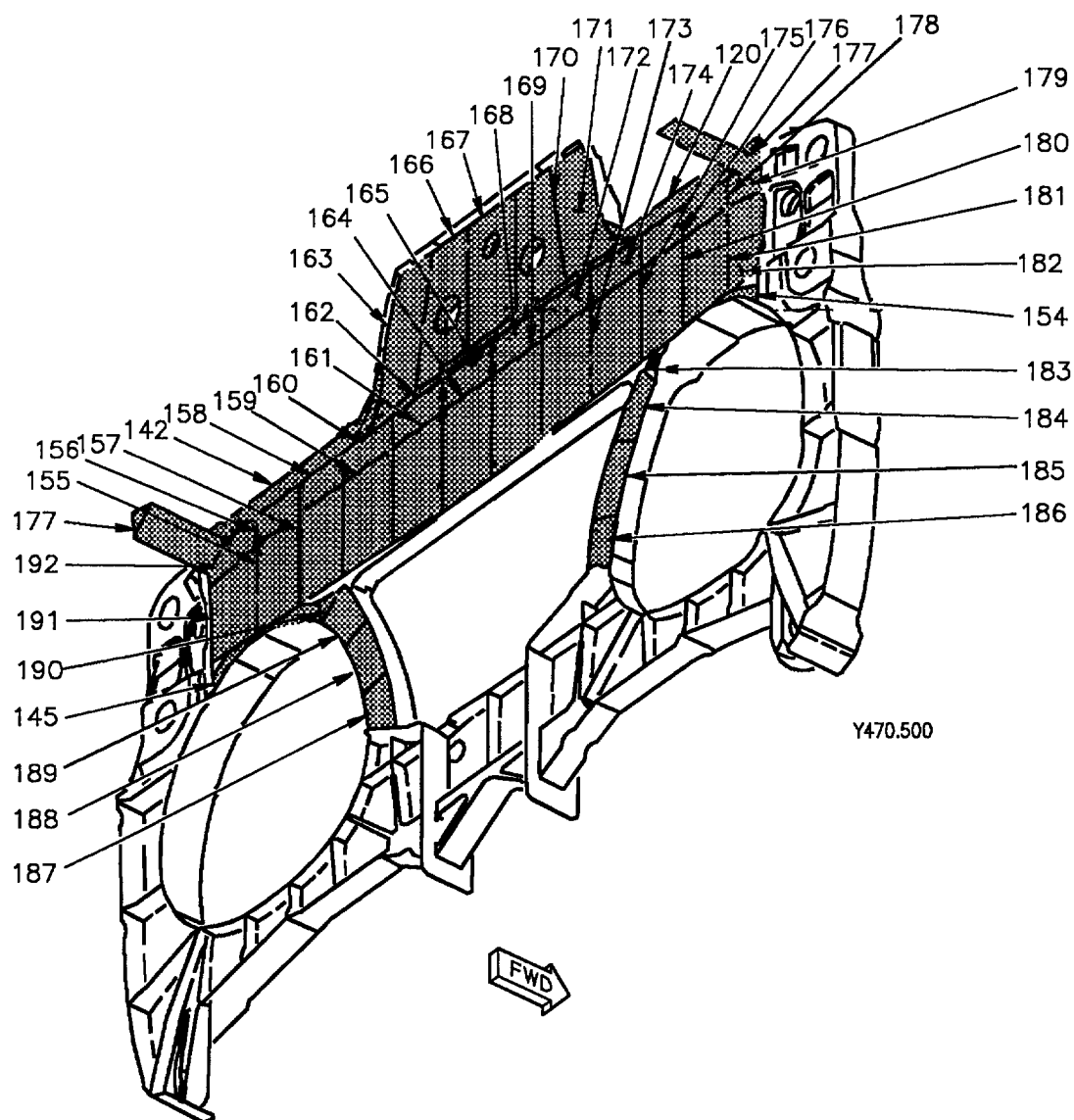


Figure 1. Material Index (Sheet 5)

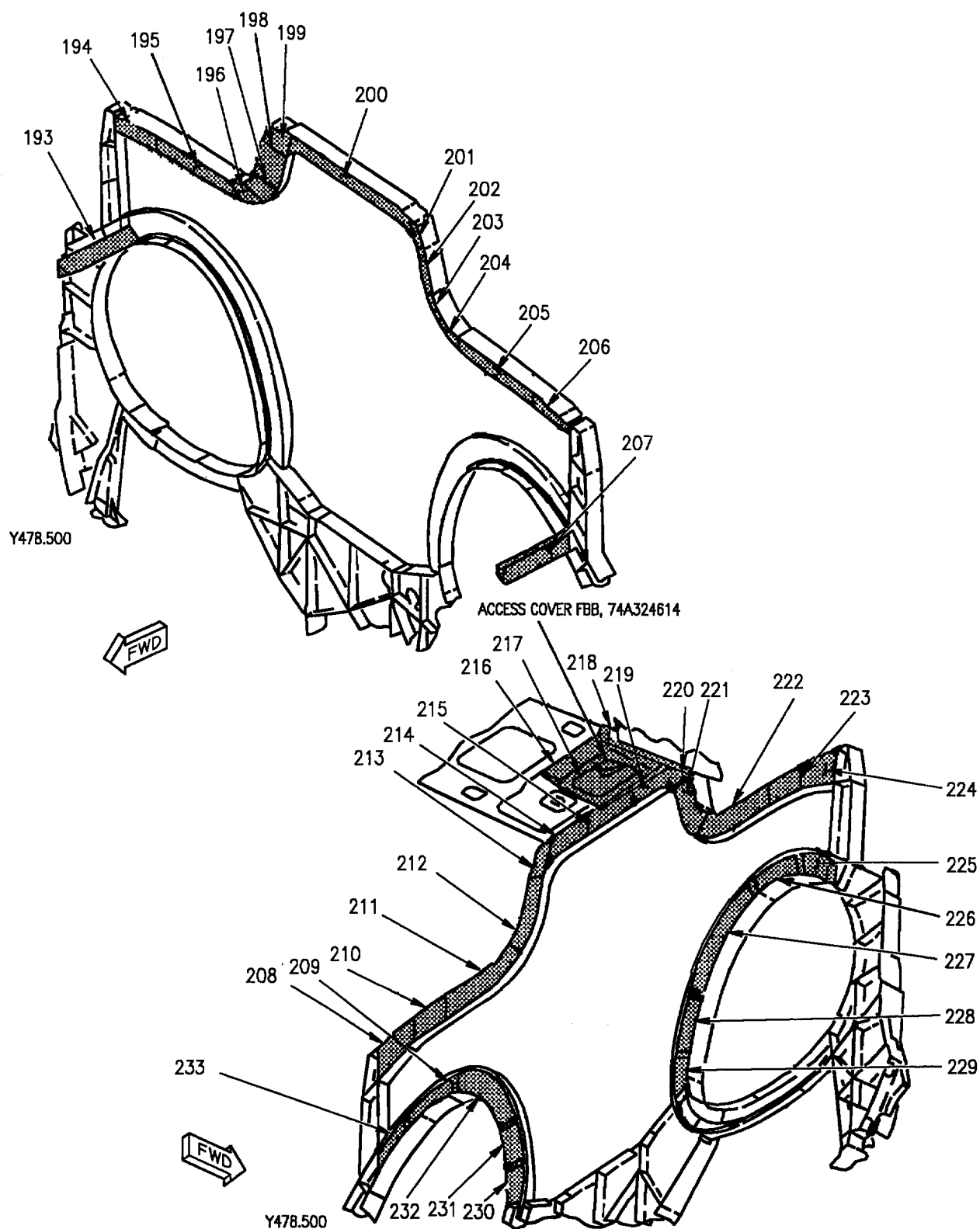


Figure 1. Material Index (Sheet 6)

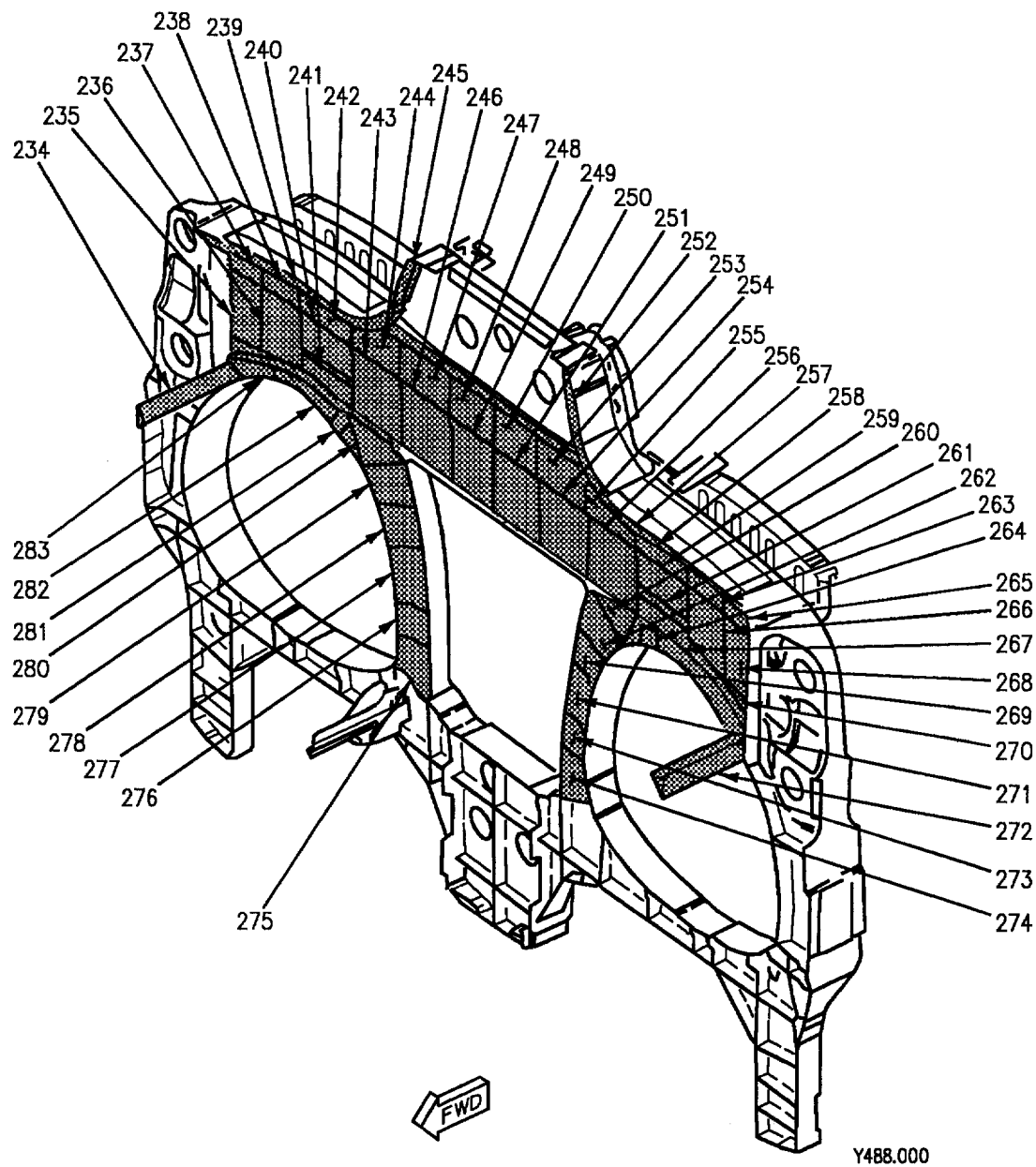


Figure 1. Material Index (Sheet 7)





































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2		Filler (Foam) 74A586400-3373	1.00 X 5.25 X 8.00	 
3		Filler (Foam) 74A586400-3369	1.00 X 3.00 X 7.00	 
4		Filler (Foam) 74A586400-3387	1.00 X 2.00 X 6.25	 
5		Filler (Foam) 74A586400-3377	1.00 X 3.00 X 4.25	 
6		Filler (Foam) 74A586400-3385	1.00 X 4.75 X 7.25	 
7		Filler (Foam) 74A586400-3375	1.00 X 3.00 X 4.50	 
8		Filler (Foam) 74A586400-3379	1.00 X 3.00 X 3.75	 
9		Filler (Foam) 74A586400-3411	1.20 X 1.70 X 21.25	 
10		Filler (Foam) 74A586400-3383	1.00 X 3.00 X 3.75	 
11		Filler (Foam) 74A586400-3393	1.00 X 4.75 X 7.25	 
12		Filler (Foam) 74A586400-3395	1.00 X 2.00 X 7.25	 
13		Filler (Foam) 74A586400-3391	1.00 X 6.50 X 7.25	 
14		Filler (Foam) 74A586400-3401	1.00 X 4.75 X 6.50	 
15		Filler (Foam) 74A586400-3357	1.00 X 7.90 X 14.60	 
16		Filler (Foam) 74A586400-3403	1.00 X 2.25 X 6.50	 
17		Filler (Foam) 74A586400-3399	1.00 X 3.50 X 7.00	 
18		Filler (Foam) 74A586400-3405	1.00 X 2.25 X 4.75	 

Figure 1. Material Index (Sheet 8)





































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20		Filler (Foam) 74A586400-3400	1.00 X 3.50 X 7.00	 
21		Filler (Foam) 74A586400-3361	1.00 X 8.10 X 13.50	 
22		Filler (Foam) 74A586400-3407	1.00 X 4.50 X 5.00	 
23		Filler (Foam) 74A586400-3445	1.00 X 6.50 X 7.25	 
24		Filler (Foam) 74A586400-3363	1.00 X 7.90 X 14.60	 
25		Filler (Foam) 74A586400-3384	1.00 X 3.00 X 3.75	 
26		Filler (Foam) 74A586400-3412	1.20 X 1.70 X 21.25	 
27		Filler (Foam) 74A586400-3404	1.00 X 2.25 X 6.50	 
28		Filler (Foam) 74A586400-3376	1.00 X 3.00 X 4.50	 
29		Filler (Foam) 74A586400-3370	1.00 X 3.00 X 7.00	 
30		Filler (Foam) 74A586400-3378	1.00 X 3.00 X 4.25	 
31		Filler (Foam) 74A586400-3372	1.00 X 7.25 X 8.00	 
32		Filler (Foam) 74A586400-3374	1.00 X 5.25 X 8.00	 
33		Filler (Foam) 74A586400-3380	1.00 X 3.00 X 3.75	 
34		Filler (Foam) 74A586400-3420	1.20 X 1.70 X 16.00	 
35		Filler (Foam) 74A586400-3386	1.00 X 4.75 X 7.25	 
36		Filler (Foam) 74A586400-3388	1.00 X 2.00 X 6.25	 

Figure 1. Material Index (Sheet 9)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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39		Filler (Foam) 74A586400-3443	1.00 X 9.00 X 10.00	 
40		Filler (Foam) 74A586400-3437	1.00 X 8.00 X 9.00	 
41		Filler (Foam) 74A586400-3398	1.00 X 7.25 X 9.00	 
42		Filler (Foam) 74A586400-3353	1.00 X 6.50 X 8.00	 
43		Filler (Foam) 74A586400-3351	1.00 X 6.80 X 8.00	 
44		Filler (Foam) 74A586400-3382	1.00 X 6.75 X 9.00	 
45		Filler (Foam) 74A586400-3349	1.00 X 6.80 X 8.00	 
46		Filler (Foam) 74A586400-3381	1.00 X 6.75 X 9.00	 
47		Filler (Foam) 74A586400-3347	1.00 X 6.50 X 8.00	 
48		Filler (Foam) 74A586400-3439	1.00 X 8.00 X 9.00	 
49		Filler (Foam) 74A586400-3397	1.00 X 7.25 X 9.00	 
50		Filler (Foam) 74A586400-3447	1.00 X 9.00 X 10.00	 
51		Filler (Foam) 74A586400-3419	1.20 X 1.70 X 16.00	 
52		Filler (Foam) 74A586400-3308	1.50 X 1.63 X 7.50	 
53		Filler (Foam) 74A586400-3230	1.00 X 1.62 X 3.50	 
54		Filler (Foam) 74A586400-3465	1.25 X 1.25 X 5.50	 

Figure 1. Material Index (Sheet 10)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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56		Filler (Foam) 74A586400-3226	1.00 X 2.38 X 4.25	 
57		Filler (Foam) 74A586400-3224	1.00 X 2.38 X 5.00	 
58		Filler (Foam) 74A586400-3220	1.00 X 3.00 X 8.75	 
59		Filler (Foam) 74A586400-3218	1.00 X 2.50 X 4.00	 
60		Filler (Foam) 74A586400-3216	1.00 X 2.50 X 5.25	 
61		Filler (Foam) 74A586400-3215	1.00 X 2.50 X 5.25	 
62		Filler (Foam) 74A586400-3217	1.00 X 2.50 X 4.00	 
63		Filler (Foam) 74A586400-3219	1.00 X 3.00 X 8.75	 
64		Filler (Foam) 74A586400-3223	1.00 X 2.38 X 5.00	 
65		Filler (Foam) 74A586400-3225	1.00 X 2.38 X 4.25	 
66		Filler (Foam) 74A586400-3227	1.00 X 3.38 X 6.25	 
67		Filler (Foam) 74A586400-3231	1.00 X 1.75 X 4.50	 
68		Filler (Foam) 74A586400-3229	1.00 X 1.62 X 3.50	 
69		Filler (Foam) 74A586400-3233	1.00 X 1.50 X 2.50	 
70		Filler (Foam) 74A586400-3235	1.00 X 1.50 X 2.25	 
71		Filler (Foam) 74A586400-3307	1.50 X 1.63 X 7.50	 
72		Filler (Foam) 74A586400-3237	1.00 X 1.50 X 4.00	 

Figure 1. Material Index (Sheet 11)

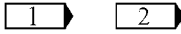

















Idx No.	Eft	Nomenclature and Part No.	Description	Material
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74		Filler (Foam) 74A586400-3241	1.00 X 2.75 X 6.75	
75		Filler (Foam) 74A586400-3242	1.00 X 2.75 X 6.75	
76		Filler (Foam) 74A586400-3240	1.00 X 1.50 X 5.25	
77		Filler (Foam) 74A586400-3238	1.00 X 1.50 X 4.00	
78		Filler (Foam) 74A586400-3236	1.00 X 1.50 X 2.25	
79		Filler (Foam) 74A586400-3234	1.00 X 1.50 X 2.50	
80		Filler (Foam) 74A586400-3232	1.00 X 1.75 X 4.50	
81		Filler (Foam) 74A586400-3201	1.00 X 2.00 X 7.88	
82		Filler (Foam) 74A586400-3463	1.25 X 1.25 X 4.50	
83		Filler (Foam) 74A586400-3189	1.00 X 3.38 X 6.50	
84		Filler (Foam) 74A586400-3191	1.00 X 2.38 X 9.50	
85		Filler (Foam) 74A586400-3193	1.00 X 2.50 X 4.38	
86		Filler (Foam) 74A586400-3195	1.00 X 2.50 X 4.63	
87		Filler (Foam) 74A586400-3197	1.00 X 2.75 X 9.25	
88		Filler (Foam) 74A586400-3198	1.00 X 2.75 X 9.25	
89		Filler (Foam) 74A586400-3196	1.00 X 2.50 X 4.63	
90		Filler (Foam) 74A586400-3194	1.00 X 2.50 X 4.38	

Figure 1. Material Index (Sheet 12)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
91		Filler (Foam) 74A586400-3192	1.00 X 2.38 X 9.50	 
92		Filler (Foam) 74A586400-3190	1.00 X 3.38 X 6.50	 
93		Filler (Foam) 74A586400-3202	1.00 X 2.00 X 7.88	 
94		Filler (Foam) 74A586400-3206	1.00 X 1.50 X 2.50	 
95		Filler (Foam) 74A586400-3208	1.00 X 1.50 X 2.25	 
96		Filler (Foam) 74A586400-3210	1.00 X 1.50 X 4.00	 
97		Filler (Foam) 74A586400-3212	1.00 X 1.50 X 5.25	 
98		Filler (Foam) 74A586400-3214	1.00 X 2.75 X 6.75	 
99		Filler (Foam) 74A586400-3211	1.00 X 1.50 X 5.25	 
100		Filler (Foam) 74A586400-3213	1.00 X 2.75 X 6.75	 
101		Filler (Foam) 74A586400-3209	1.00 X 1.50 X 4.00	 
102		Filler (Foam) 74A586400-3207	1.00 X 1.50 X 2.25	 
103		Filler (Foam) 74A586400-3205	1.00 X 1.50 X 2.50	 
104		Filler (Foam) 74A585008-2120	-	 
105		Filler (Foam) 74A585008-2149	-	 
106		Filler (Foam) 74A585008-2135	-	 
107		Filler (Foam) 74A585008-2147	-	 
108		Filler (Foam) 74A585008-2133	-	 

Figure 1. Material Index (Sheet 13)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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110		Filler (Foam) 74A585008-2131	-	 
111		Filler (Foam) 74A585008-2129	-	 
112		Filler (Foam) 74A585008-2103	-	 
113		Filler (Foam) 74A585008-2114	-	 
114		Filler (Foam) 74A585008-2116	-	 
115		Filler (Foam) 74A585008-2118	-	 
116		Filler (Foam) 74A586400-3310	1.75 X 2.50 X 6.50	 
117		Filler (Foam) 74A586400-2303	0.090 X 3.05 X 6.45	 
118		Filler (Foam) 74A586400-2305	0.90 X 6.05 X 8.20	 
119		Filler (Foam) 74A586400-2301	1.00 X 2.95 X 5.20	 
120		Filler (Foam) 74A586400-3424	1.20 X 1.70 X 20.50	 
121		Filler (Foam) 74A586400-2307	1.00 X 5.40 X 8.35	 
122		Filler (Foam) 74A586400-2299	0.90 X 3.15 X 5.25	 
123		Filler (Foam) 74A586400-2309	0.90 X 5.40 X 8.75	 
124		Filler (Foam) 74A586400-2295	0.90 X 3.10 X 6.30	 
125		Filler (Foam) 74A586400-3421	0.62 X 1.00 X 7.00	 
126		Filler (Foam) 74A586400-2297	1.00 X 6.35 X 9.05	 

Figure 1. Material Index (Sheet 14)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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128		Filler (Foam) 74A586400-2293	0.90 X 6.50 X 9.15	 
129		Filler (Foam) 74A586400-2287	0.90 X 3.35 X 6.35	 
130		Filler (Foam) 74A586400-2289	0.90 X 6.35 X 9.35	 
131		Filler (Foam) 74A586400-2285	0.90 X 3.35 X 6.35	 
132		Filler (Foam) 74A586400-2283	0.90 X 6.35 X 9.35	 
133		Filler (Foam) 74A586400-2281	0.90 X 3.15 X 6.25	 
134		Filler (Foam) 74A586400-2277	0.90 X 6.50 X 9.15	 
135		Filler (Foam) 74A586400-2279	0.90 X 3.10 X 6.30	 
136		Filler (Foam) 74A586400-2275	1.00 X 6.35 X 8.90	 
137		Filler (Foam) 74A586400-2273	0.90 X 3.15 X 5.25	 
138		Filler (Foam) 74A586400-2263	0.90 X 5.40 X 8.75	 
139		Filler (Foam) 74A586400-2271	1.00 X 2.95 X 5.20	 
140		Filler (Foam) 74A586400-2265	1.00 X 5.40 X 8.35	 
141		Filler (Foam) 74A586400-2269	0.90 X 3.05 X 6.45	 
142		Filler (Foam) 74A586400-3423	1.20 X 1.70 X 20.50	 
143		Filler (Foam) 74A586400-2267	0.90 X 6.05 X 8.20	 
144		Filler (Foam) 74A586400-2261	0.90 X 2.15 X 3.25	 

Figure 1. Material Index (Sheet 15)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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146		Filler (Foam) 74A586400-2259	3.85 X 6.15 X 0.90	<input type="text" value="1"/> <input type="text" value="2"/>
147		Filler (Foam) 74A586400-2257	4.05 X 6.70 X 0.90	<input type="text" value="1"/> <input type="text" value="2"/>
148		Filler (Foam) 74A586400-3309	1.75 X 2.50 X 6.50	<input type="text" value="1"/> <input type="text" value="2"/>
149		Filler (Foam) 74A586400-2907	1.00 X 2.25 X 6.50	<input type="text" value="1"/> <input type="text" value="2"/>
150		Filler (Foam) 74A586400-2905	1.00 X 2.25 X 6.50	<input type="text" value="1"/> <input type="text" value="2"/>
151		Filler (Foam) 74A586400-2315	0.90 X 4.05 X 6.70	<input type="text" value="1"/> <input type="text" value="2"/>
152		Filler (Foam) 74A586400-2313	0.90 X 3.85 X 6.15	<input type="text" value="1"/> <input type="text" value="2"/>
153		Filler (Foam) 74A586400-2311	0.90 X 2.15 X 3.25	<input type="text" value="1"/> <input type="text" value="2"/>
154		Filler (Foam) 74A586400-3426	1.20 X 1.70 X 14.75	<input type="text" value="1"/> <input type="text" value="2"/>
155		Filler (Foam) 74A586400-2125	0.90 X 5.55 X 8.35	<input type="text" value="1"/> <input type="text" value="2"/>
156		Filler (Foam) 74A586400-2119	0.90 X 3.15 X 5.35	<input type="text" value="1"/> <input type="text" value="2"/>
157		Filler (Foam) 74A586400-2127	0.90 X 5.25 X 8.70	<input type="text" value="1"/> <input type="text" value="2"/>
158		Filler (Foam) 74A586400-2121	0.90 X 3.05 X 5.25	<input type="text" value="1"/> <input type="text" value="2"/>
159		Filler (Foam) 74A586400-2115	0.90 X 6.35 X 8.95	<input type="text" value="1"/> <input type="text" value="2"/>
160		Filler (Foam) 74A586400-2113	0.85 X 3.15 X 6.35	<input type="text" value="1"/> <input type="text" value="2"/>
161		Filler (Foam) 74A586400-2111	0.90 X 6.70 X 9.10	<input type="text" value="1"/> <input type="text" value="2"/>
162		Filler (Foam) 74A586400-2109	0.90 X 3.15 X 6.45	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 16)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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164		Filler (Foam) 74A586400-2107	0.85 X 6.50 X 9.25	 
165		Filler (Foam) 74A586400-2105	0.85 X 3.35 X 6.35	 
166		Filler (Foam) 74A586400-2101	0.95 X 6.85 X 12.15	 
167		Filler (Foam) 74A586400-2099	0.80 X 5.95 X 11.80	 
168		Filler (Foam) 74A586400-2093	0.90 X 3.35 X 6.40	 
169		Filler (Foam) 74A586400-2091	0.85 X 6.50 X 9.25	 
170		Filler (Foam) 74A586400-2097	0.85 X 6.95 X 12.20	 
171		Filler (Foam) 74A586400-2095	0.85 X 7.35 X 13.65	 
172		Filler (Foam) 74A586400-2089	0.90 X 3.10 X 6.55	 
173		Filler (Foam) 74A586400-2087	0.90 X 6.70 X 9.10	 
174		Filler (Foam) 74A586400-2085	0.85 X 3.15 X 6.35	 
175		Filler (Foam) 74A586400-2081	0.90 X 6.65 X 9.15	 
176		Filler (Foam) 74A586400-2083	0.90 X 3.05 X 5.25	 
177		Filler (Foam) 74A586400-3467	1.25 X 1.25 X 6.00	 
178		Filler (Foam) 74A586400-2079	0.90 X 3.15 X 5.35	 
179		Filler (Foam) 74A586400-2077	0.80 X 3.25 X 6.35	 
180		Filler (Foam) 74A586400-2071	0.90 X 5.25 X 8.70	 

Figure 1. Material Index (Sheet 17)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
181		Filler (Foam) 74A586400-2073	0.90 X 5.55 X 8.35	 
182		Filler (Foam) 74A586400-2075	0.75 X 6.25 X 8.45	 
183		Filler (Foam) 74A586400-2069	1.00 X 1.65 X 2.60	 
184		Filler (Foam) 74A586400-2067	1.00 X 3.40 X 7.00	 
185		Filler (Foam) 74A586400-2065	1.10 X 2.85 X 6.85	 
186		Filler (Foam) 74A586400-2063	1.05 X 3.75 X 6.70	 
187		Filler (Foam) 74A586400-2135	1.00 X 2.75 X 6.50	 
188		Filler (Foam) 74A586400-2133	1.10 X 2.85 X 6.85	 
189		Filler (Foam) 74A586400-2131	1.00 X 3.40 X 7.05	 
190		Filler (Foam) 74A586400-2129	1.00 X 1.65 X 2.60	 
191		Filler (Foam) 74A586400-2123	0.75 X 6.25 X 8.45	 
192		Filler (Foam) 74A586400-2117	0.80 X 3.25 X 6.35	 
193		Filler (Foam) 74A586400-3312	2.00 X 2.75 X 6.25	 
194		Filler (Foam) 74A586400-3288	1.00 X 3.25 X 5.38	 
195		Filler (Foam) 74A586400-3286	1.00 X 2.38 X 11.88	 
196		Filler (Foam) 74A586400-3282	3.80 X 2.25 X 0.80	 
197		Filler (Foam) 74A586400-3280	1.00 X 2.38 X 4.25	 
198		Filler (Foam) 74A586400-3278	1.00 X 2.50 X 5.25	 

Figure 1. Material Index (Sheet 18)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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200		Filler (Foam) 74A586400-3271	1.00 X 2.38 X 18.75	 
201		Filler (Foam) 74A586400-3275	1.00 X 2.48 X 3.00	 
202		Filler (Foam) 74A586400-3277	1.00 X 2.50 X 5.25	 
203		Filler (Foam) 74A586400-3279	1.00 X 2.48 X 4.25	 
204		Filler (Foam) 74A586400-3281	1.00 X 2.48 X 4.25	 
205		Filler (Foam) 74A586400-3285	1.00 X 2.48 X 11.86	 
206		Filler (Foam) 74A586400-3287	1.00 X 3.25 X 5.38	 
207		Filler (Foam) 74A586400-3311	2.00 X 2.75 X 6.25	 
208		Filler (Foam) 74A586400-3259	1.00 X 3.25 X 5.38	 
209		Filler (Foam) 74A586400-3263	1.00 X 1.88 X 8.25	 
210		Filler (Foam) 74A586400-3257	1.00 X 2.38 X 5.00	 
211		Filler (Foam) 74A586400-3255	1.00 X 3.13 X 11.00	 
212		Filler (Foam) 74A586400-3253	1.00 X 2.88 X 9.38	 
213		Filler (Foam) 74A586400-3247	1.00 X 2.30 X 3.00	 
214		Filler (Foam) 74A586400-3245	1.00 X 2.38 X 5.88	 
215		Filler (Foam) 74A586400-3243	1.00 X 2.38 X 7.00	 
216		Filler (Foam) 74A586400-2959	1.00 X 2.48 X 9.00	 

Figure 1. Material Index (Sheet 19)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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218		Filler (Foam) 74A586400-2957	1.00 X 4.00 X 6.00	 
219		Filler (Foam) 74A586400-3246	1.00 X 2.38 X 5.88	 
220		Filler (Foam) 74A586400-3248	1.00 X 2.38 X 3.00	 
221		Filler (Foam) 74A586400-3254	1.00 X 2.88 X 9.38	 
222		Filler (Foam) 74A586400-3256	1.00 X 3.13 X 11.00	 
223		Filler (Foam) 74A586400-3258	1.00 X 2.38 X 5.00	 
224		Filler (Foam) 74A586400-3260	1.00 X 3.25 X 5.38	 
225		Filler (Foam) 74A586400-3262	1.00 X 2.50 X 7.25	 
226		Filler (Foam) 74A586400-3264	1.00 X 1.88 X 8.25	 
227		Filler (Foam) 74A586400-3266	1.00 X 1.83 X 6.63	 
228		Filler (Foam) 74A586400-3268	1.00 X 1.63 X 6.50	 
229		Filler (Foam) 74A586400-3270	1.00 X 2.25 X 5.25	 
230		Filler (Foam) 74A586400-3269	1.00 X 2.25 X 5.25	 
231		Filler (Foam) 74A586400-3267	1.00 X 1.63 X 6.50	 
232		Filler (Foam) 74A586400-3265	1.00 X 1.83 X 6.63	 
233		Filler (Foam) 74A586400-3261	1.00 X 2.50 X 7.25	 
234		Filler (Foam) 74A586400-2251	1.00 X 3.63 X 4.75	 

Figure 1. Material Index (Sheet 20)





































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236		Filler (Foam) 74A586400-2247	1.00 X 3.00 X 4.75	 
237		Filler (Foam) 74A586400-2245	1.00 X 3.50 X 4.00	 
238		Filler (Foam) 74A586400-2243	1.00 X 4.25 X 4.75	 
239		Filler (Foam) 74A586400-2241	1.00 X 3.13 X 5.25	 
240		Filler (Foam) 74A586400-3436	1.20 X 1.70 X 2.65	 
241		Filler (Foam) 74A586400-3434	1.20 X 1.70 X 11.35	 
242		Filler (Foam) 74A586400-3432	1.20 X 1.70 X 6.00	 
243		Filler (Foam) 74A586400-3413	1.00 X 2.70 X 16.00	 
244		Filler (Foam) 74A586400-2237	1.00 X 5.00 X 7.00	 
245		Filler (Foam) 74A586400-2239	1.00 X 4.50 X 6.75	 
246		Filler (Foam) 74A586400-2235	1.25 X 4.25 X 5.25	 
247		Filler (Foam) 74A586400-2231	1.25 X 3.75 X 4.50	 
248		Filler (Foam) 74A586400-3430	1.20 X 1.70 X 25.00	 
249		Filler (Foam) 74A586400-2233	1.00 X 3.13 X 6.38	 
250		Filler (Foam) 74A586400-3365	1.00 X 1.63 X 6.38	 
251		Filler (Foam) 74A586400-2229	1.25 X 3.50 X 6.38	 
252		Filler (Foam) 74A586400-2227	1.00 X 6.13 X 6.63	 

Figure 1. Material Index (Sheet 21)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
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254		Filler (Foam) 74A586400-2223	1.00 X 6.38 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
255		Filler (Foam) 74A586400-3428	0.62 X 1.50 X 9.00	<input type="text" value="1"/> <input type="text" value="2"/>
256		Filler (Foam) 74A586400-2221	1.25 X 3.75 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
257		Filler (Foam) 74A586400-2217	1.25 X 3.75 X 5.75	<input type="text" value="1"/> <input type="text" value="2"/>
258		Filler (Foam) 74A586400-2219	1.00 X 5.75 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
259		Filler (Foam) 74A586400-2215	1.25 X 3.75 X 5.75	<input type="text" value="1"/> <input type="text" value="2"/>
260		Filler (Foam) 74A586400-2213	1.00 X 5.75 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
261		Filler (Foam) 74A586400-3427	0.62 X 1.50 X 9.00	<input type="text" value="1"/> <input type="text" value="2"/>
262		Filler (Foam) 74A586400-2211	1.25 X 3.75 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
263		Filler (Foam) 74A586400-2209	1.00 X 6.38 X 6.75	<input type="text" value="1"/> <input type="text" value="2"/>
264		Filler (Foam) 74A586400-2207	1.25 X 3.63 X 6.13	<input type="text" value="1"/> <input type="text" value="2"/>
265		Filler (Foam) 74A586400-2205	1.00 X 6.13 X 6.63	<input type="text" value="1"/> <input type="text" value="2"/>
266		Filler (Foam) 74A586400-3429	1.20 X 1.70 X 25.00	<input type="text" value="1"/> <input type="text" value="2"/>
267		Filler (Foam) 74A586400-2203	1.25 X 3.50 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
268		Filler (Foam) 74A586400-2193	1.00 X 3.13 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>
269		Filler (Foam) 74A586400-2191	1.00 X 3.13 X 5.25	<input type="text" value="1"/> <input type="text" value="2"/>
270		Filler (Foam) 74A586400-3367	1.00 X 1.63 X 6.38	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 22)






























Idx No.	Eft	Nomenclature and Part No.	Description	Material
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272		Filler (Foam) 74A586400-3435	1.20 X 1.70 X 2.65	 
273		Filler (Foam) 74A586400-2201	1.25 X 3.75 X 4.50	 
274		Filler (Foam) 74A586400-2199	1.25 X 4.25 X 5.25	 
275		Filler (Foam) 74A586400-2195	1.00 X 4.50 X 6.75	 
276		Filler (Foam) 74A586400-3433	1.20 X 1.70 X 11.35	 
277		Filler (Foam) 74A586400-2197	1.00 X 5.00 X 7.00	 
278		Filler (Foam) 74A586400-2187	1.00 X 3.50 X 4.00	 
279		Filler (Foam) 74A586400-3431	1.20 X 1.70 X 6.00	 
280		Filler (Foam) 74A586400-2185	1.00 X 3.00 X 4.75	 
281		Filler (Foam) 74A586400-3313	2.13 X 3.00 X 6.75	 
282		Filler (Foam) 74A586400-2183	1.00 X 2.88 X 3.50	 
283		Filler (Foam) 74A586400-2181	1.00 X 3.63 X 4.75	 
<p style="text-align: center;">LEGEND</p> <p> Bond foam using EC-847 adhesive, 3M Company, St. Paul, Minn. 04963.</p> <p> Make from PPP-C-1752, type 1, 2 pounds per cu. ft. Class III.</p> <p> Make from basil laminated sandwich panel, 1.7 +0.001 -0.000 inches thick.</p>				

Figure 1. Material Index (Sheet 23)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y488.000 THROUGH Y518.000

EFFECTIVITY: 161353 THRU 161741

Reference Material

Fuel System A1-F18AC-460-300
 No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.1. **DAMAGE EVALUATION.** See figure 1.5. **REPLACEMENT.**

2. The figure identifies types of material used. Data shown can be used to analyze damage.

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).

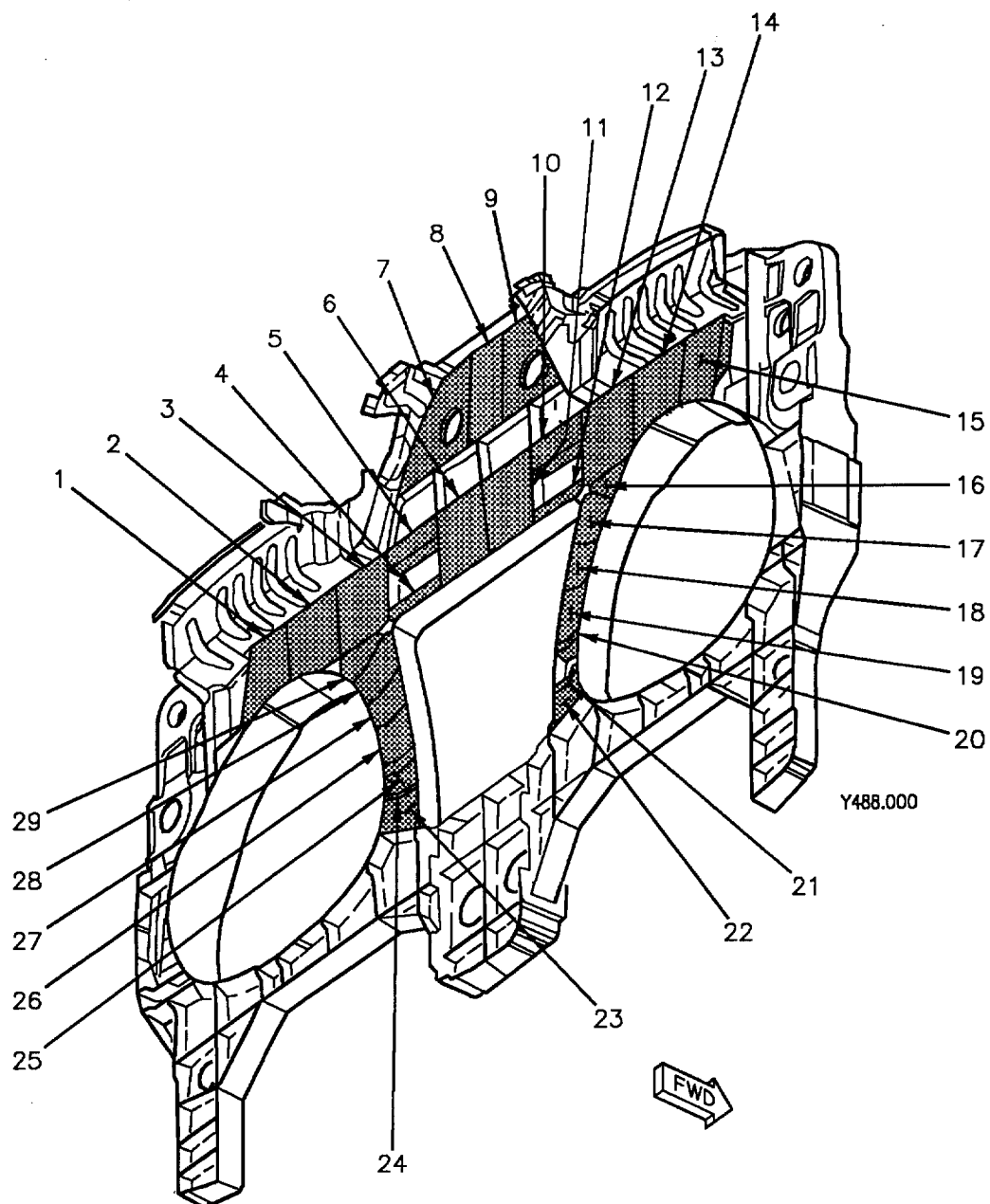


Figure 1. Material Index (Sheet 1)

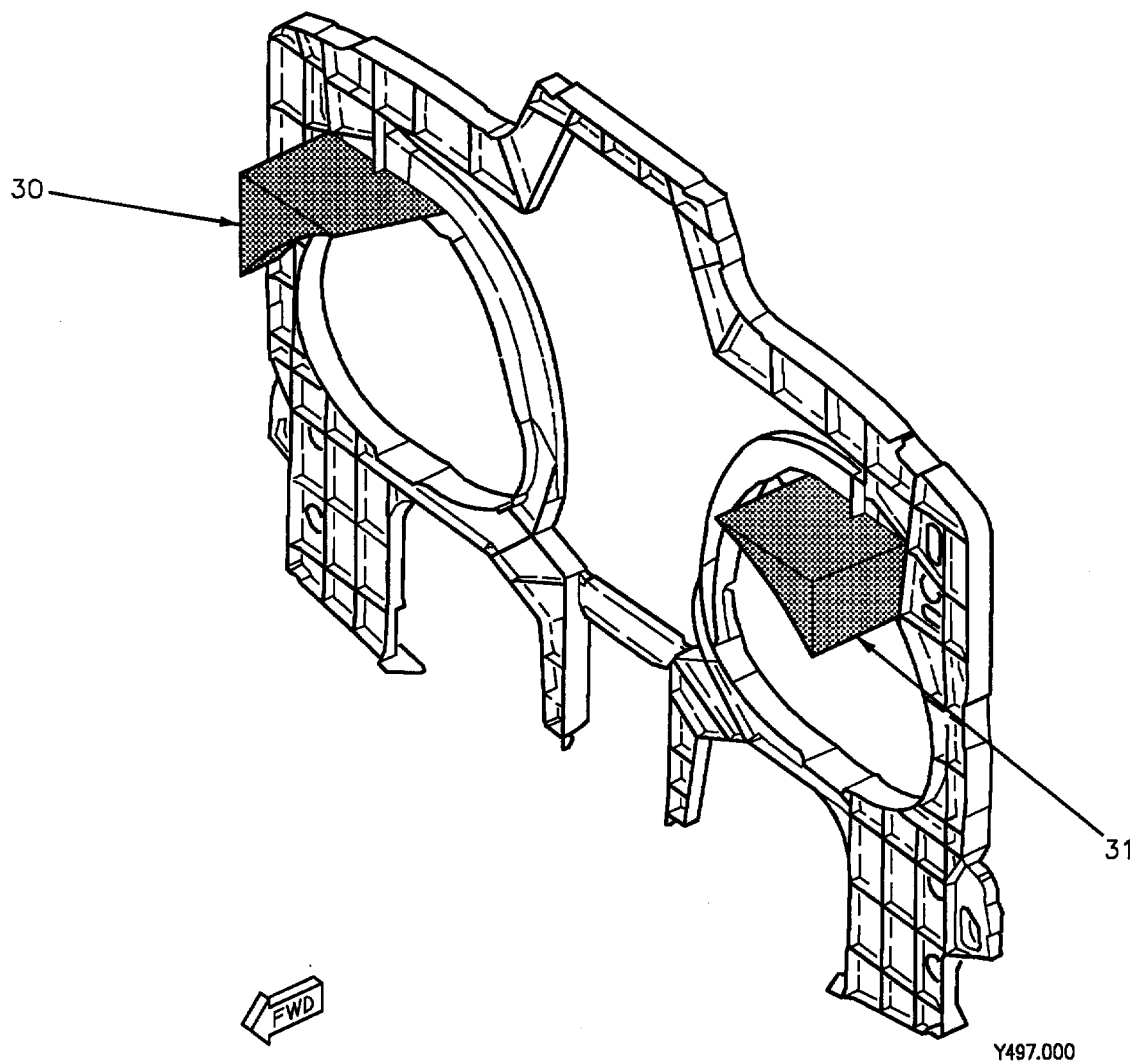


Figure 1. Material Index (Sheet 2)

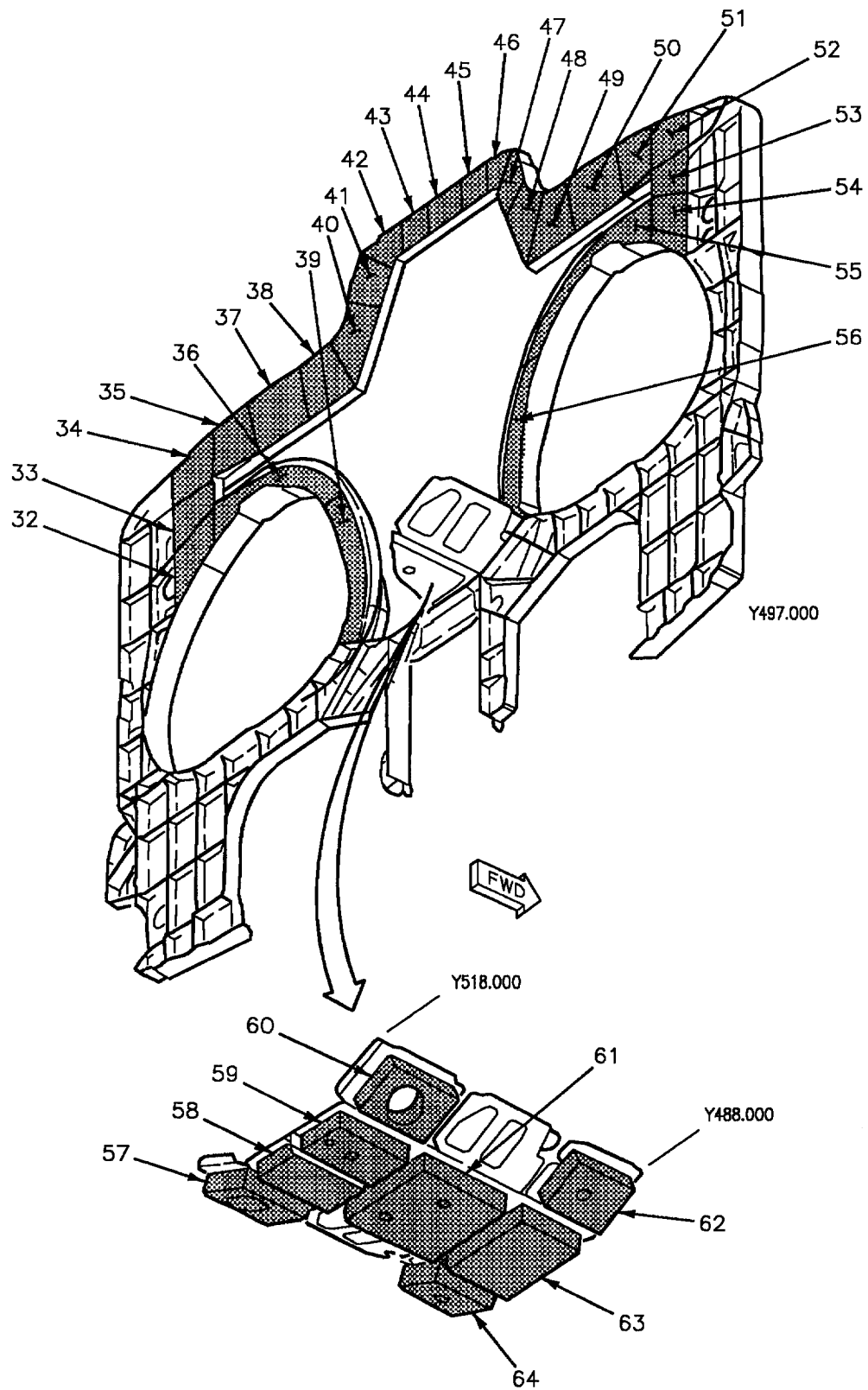
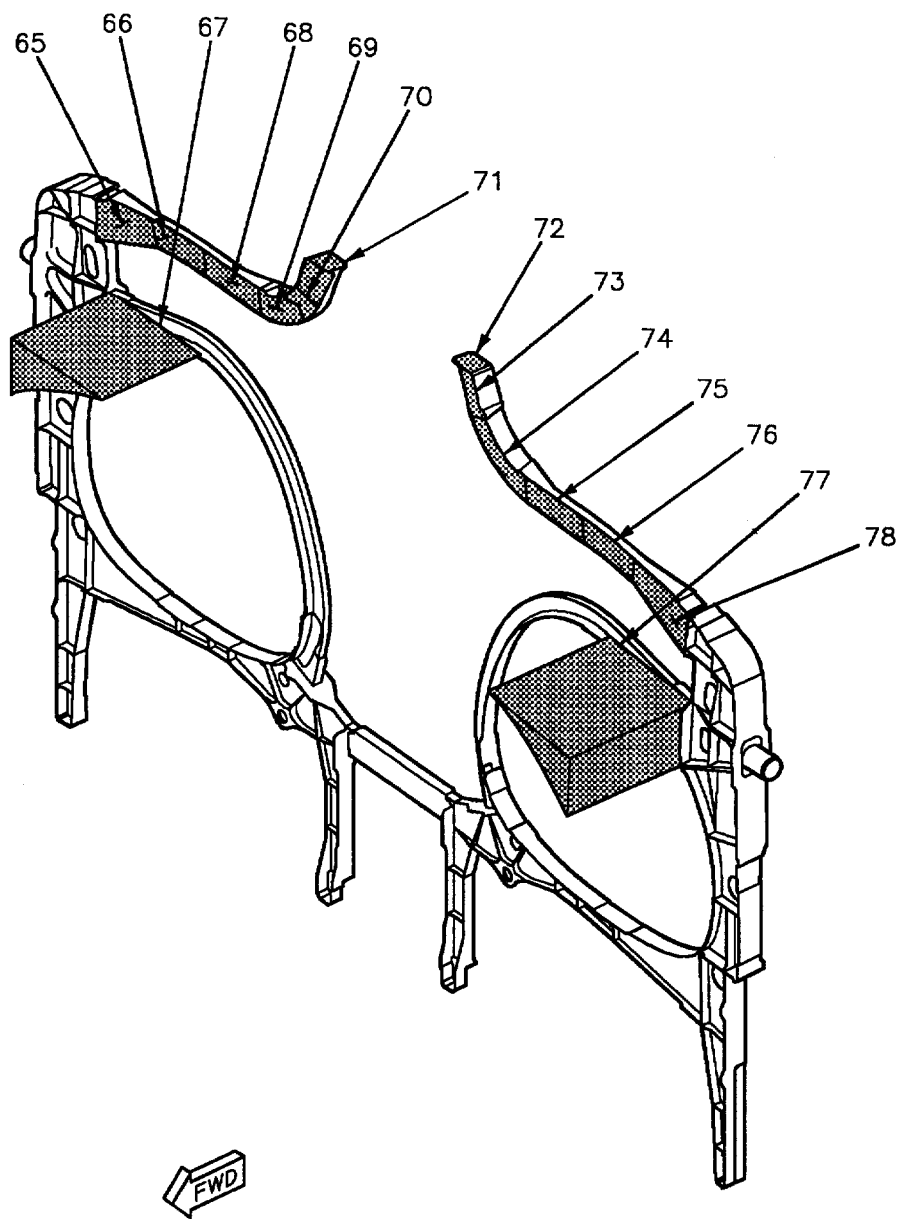


Figure 1. Material Index (Sheet 3)



Y508.000

Figure 1. Material Index (Sheet 4)

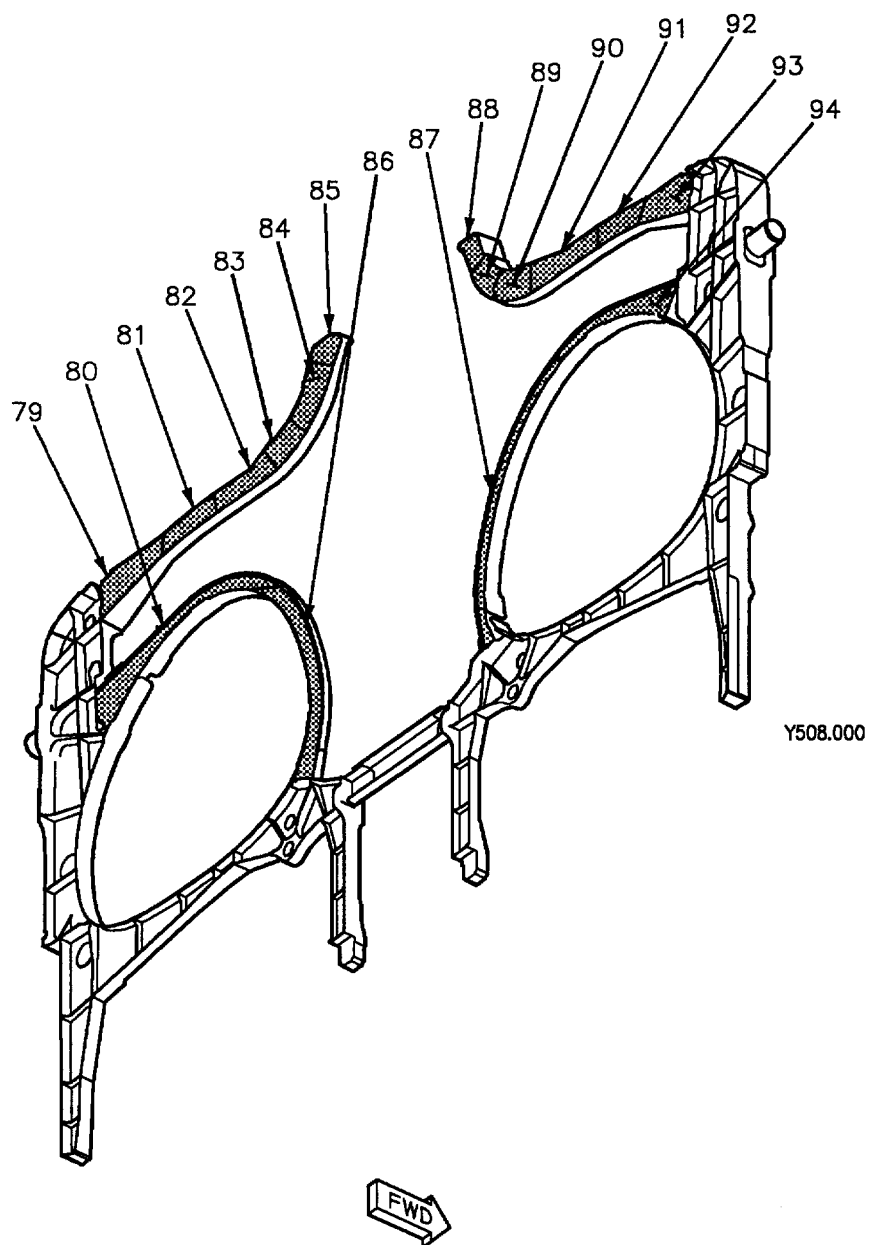
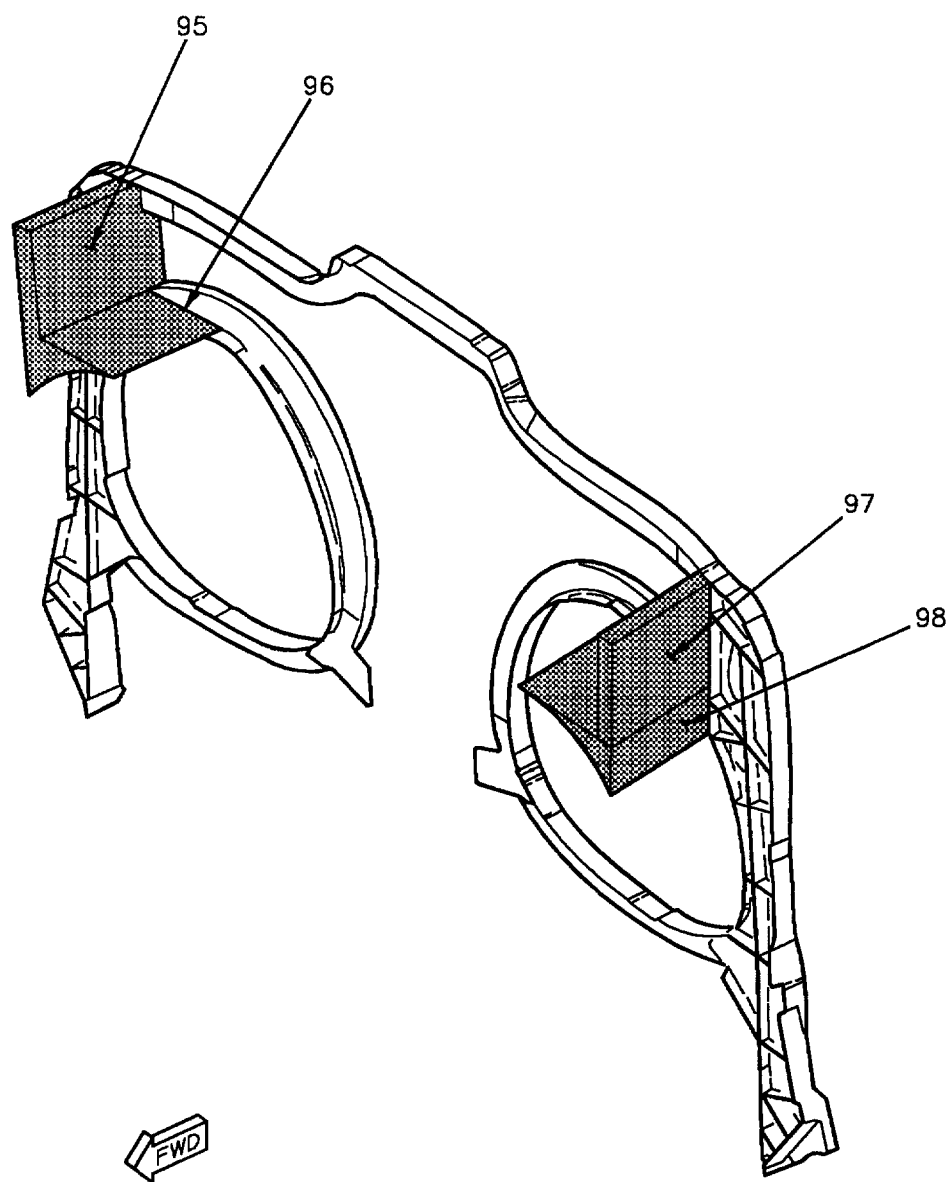


Figure 1. Material Index (Sheet 5)



Y518.000

Figure 1. Material Index (Sheet 6)





































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2		Filler (Foam) 74A586400-2045	1.00 X 7.25 X 7.50	 
3		Filler (Foam) 74A586400-2043	1.00 X 6.00 X 6.50	 
4		Filler (Foam) 74A586400-2041	1.00 X 0.50 X 6.25	 
5		Filler (Foam) 74A586400-2037	1.00 X 2.25 X 6.25	 
6		Filler (Foam) 74A586400-2039	1.00 X 0.50 X 6.25	 
7		Filler (Foam) 74A586400-2033	1.00 X 8.05 X 9.50	 
8		Filler (Foam) 74A586400-2031	1.15 X 4.35 X 9.50	 
9		Filler (Foam) 74A586400-2001	1.00 X 9.55 X 9.95	 
10		Filler (Foam) 74A586400-2005	1.00 X 2.25 X 6.25	 
11		Filler (Foam) 74A586400-2007	1.00 X 5.50 X 6.50	 
12		Filler (Foam) 74A586400-2009	1.00 X 0.50 X 6.25	 
13		Filler (Foam) 74A586400-2011	1.00 X 6.00 X 6.50	 
14		Filler (Foam) 74A586400-2013	0.95 X 7.35 X 13.75	 
15		Filler (Foam) 74A586400-2015	1.00 X 4.25 X 6.75	 
16		Filler (Foam) 74A586400-2019	1.25 X 2.75 X 5.00	 
17		Filler (Foam) 74A586400-2021	1.38 X 4.62 X 4.62	 
18		Filler (Foam) 74A586400-2023	1.38 X 3.25 X 3.50	 

Figure 1. Material Index (Sheet 7)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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20		Filler (Foam) 74A586400-2003	0.88 X 1.38 X 2.62	 
21		Filler (Foam) 74A586400-2027	0.88 X 1.38 X 2.88	 
22		Filler (Foam) 74A586400-2029	1.50 X 3.50 X 4.50	 
23		Filler (Foam) 74A586400-2061	1.38 X 3.50 X 4.00	 
24		Filler (Foam) 74A586400-2059	0.88 X 1.38 X 2.88	 
25		Filler (Foam) 74A586400-2035	0.88 X 1.38 X 2.62	 
26		Filler (Foam) 74A586400-2057	1.38 X 2.75 X 4.50	 
27		Filler (Foam) 74A586400-2055	1.38 X 3.25 X 3.50	 
28		Filler (Foam) 74A586400-2053	1.38 X 4.62 X 4.62	 
29		Filler (Foam) 74A586400-2051	1.25 X 2.75 X 5.00	 
30		Filler (Foam) 74A586400-2894	2.40 X 6.25 X 8.25	 
31		Filler (Foam) 74A586400-2893	2.40 X 6.25 X 8.25	 
32		Filler (Foam) 74A586400-2629	0.95 X 5.05 X 8.35	 
33		Filler (Foam) 74A586400-2627	0.95 X 4.75 X 5.35	 
34		Filler (Foam) 74A586400-2625	1.00 X 4.45 X 5.75	 
35		Filler (Foam) 74A586400-2623	1.00 X 4.85 X 4.85	 
36		Filler (Foam) 74A586400-2631	1.15 X 4.55 X 24.45	 

Figure 1. Material Index (Sheet 8)





































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38		Filler (Foam) 74A586400-2619	0.90 X 5.25 X 7.00	 
39		Filler (Foam) 74A586400-2633	1.15 X 2.05 X 12.45	 
40		Filler (Foam) 74A586400-2617	0.90 X 5.00 X 7.85	 
41		Filler (Foam) 74A586400-2615	1.00 X 4.00 X 4.95	 
42		Filler (Foam) 74A586400-2613	0.80 X 2.75 X 3.95	 
43		Filler (Foam) 74A586400-2611	0.70 X 2.15 X 3.80	 
44		Filler (Foam) 74A586400-2609	0.95 X 2.05 X 4.95	 
45		Filler (Foam) 74A586400-2607	0.70 X 2.15 X 3.80	 
46		Filler (Foam) 74A586400-2605	0.80 X 2.75 X 3.95	 
47		Filler (Foam) 74A586400-2603	1.00 X 4.00 X 4.95	 
48		Filler (Foam) 74A586400-2601	0.90 X 5.00 X 7.85	 
49		Filler (Foam) 74A586400-2599	0.90 X 5.25 X 7.00	 
50		Filler (Foam) 74A586400-2597	1.10 X 4.75 X 6.75	 
51		Filler (Foam) 74A586400-2595	1.00 X 4.85 X 4.85	 
52		Filler (Foam) 74A586400-2593	1.00 X 4.45 X 5.75	 
53		Filler (Foam) 74A586400-2591	0.95 X 4.75 X 5.35	 
54		Filler (Foam) 74A586400-2589	0.95 X 5.05 X 8.35	 

Figure 1. Material Index (Sheet 9)









































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56		Filler (Foam) 74A586400-2585	1.15 X 2.05 X 12.45	 
57		Filler (Foam) 74A585008-2039		 
58		Filler (Foam) 74A585008-2055		 
59		Filler (Foam) 74A585008-2019		 
60	 	Filler (Foam) 74A585008-2040 74A585008-2091		 
61		Filler (Foam) 74A585008-2017		 
62		Filler (Foam) 74A585008-2036		 
63	 	Filler (Foam) 74A585008-2015 74A585008-2079		 
64		Filler (Foam) 74A585008-2035		 
65		Filler (Foam) 74A586400-2741	1.00 X 2.60 X 6.90	 
66		Filler (Foam) 74A586400-2739	1.00 X 2.75 X 6.25	 
67		Filler (Foam) 74A586400-2892	5.00 X 10.15 X 10.65	 
68		Filler (Foam) 74A586400-2737	0.95 X 2.75 X 6.75	 
69		Filler (Foam) 74A586400-2735	1.00 X 3.75 X 5.25	 
70		Filler (Foam) 74A586400-2733	0.95 X 3.25 X 4.00	 
71		Filler (Foam) 74A586400-2731	0.90 X 3.75 X 5.00	 
72		Filler (Foam) 74A586400-2729	0.90 X 3.75 X 5.00	 

Figure 1. Material Index (Sheet 10)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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74		Filler (Foam) 74A586400-2725	1.00 X 3.75 X 5.25	 
75		Filler (Foam) 74A586400-2723	0.95 X 2.75 X 6.75	 
76		Filler (Foam) 74A586400-2721	1.00 X 2.75 X 6.25	 
77		Filler (Foam) 74A586400-2891	5.00 X 10.15 X 10.65	 
78		Filler (Foam) 74A586400-2719	1.00 X 2.60 X 6.90	 
79		Filler (Foam) 74A586400-2713	1.00 X 2.65 X 7.15	 
80		Filler (Foam) 74A586400-2715	1.15 X 5.25 X 23.45	 
81		Filler (Foam) 74A586400-2711	1.00 X 2.65 X 6.25	 
82		Filler (Foam) 74A586400-2709	1.00 X 2.65 X 6.65	 
83		Filler (Foam) 74A586400-2707	1.00 X 3.05 X 5.05	 
84		Filler (Foam) 74A586400-2705	1.00 X 2.65 X 3.80	 
85		Filler (Foam) 74A586400-2703	1.00 X 3.15 X 4.25	 
86		Filler (Foam) 74A586400-2717	1.15 X 2.30 X 20.35	 
87		Filler (Foam) 74A586400-2687	1.15 X 2.30 X 20.35	 
88		Filler (Foam) 74A586400-2701	1.00 X 3.15 X 4.25	 
89		Filler (Foam) 74A586400-2699	1.00 X 2.65 X 3.80	 
90		Filler (Foam) 74A586400-2697	1.00 X 3.05 X 5.05	 

Figure 1. Material Index (Sheet 11)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
91		Filler (Foam) 74A586400-2695	1.00 X 2.65 X 6.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
92		Filler (Foam) 74A586400-2693	1.00 X 2.65 X 6.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
93		Filler (Foam) 74A586400-2691	1.00 X 2.65 X 7.15	<input type="checkbox"/> 1 <input type="checkbox"/> 2
94		Filler (Foam) 74A586400-2689	1.15 X 5.25 X 23.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
95		Filler (Foam) 74A586400-2991		<input type="checkbox"/> 1 <input type="checkbox"/> 2
96		Filler (Foam) 74A586400-2890	4.70 X 9.15 X 10.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
97		Filler (Foam) 74A586400-2989		<input type="checkbox"/> 1 <input type="checkbox"/> 2
98		Filler (Foam) 74A586400-2889	4.70 X 9.15 X 10.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
<p style="text-align: center;">LEGEND</p> <p><input type="checkbox"/> 1 Make from PPP-C-1752, type 1, 2 pounds per cu. ft., class III.</p> <p><input type="checkbox"/> 2 Bond foam using EC-847 adhesive - 3M Company, St. Paul, Minn. 04963.</p> <p><input type="checkbox"/> 3 Basil laminated sandwich panel, 1.7 +0.001 -0.000 inches thick.</p> <p><input type="checkbox"/> 4 161353 THRU 161705, 161707.</p> <p><input type="checkbox"/> 5 161706, 161708 THRU 161741.</p> <p><input type="checkbox"/> 6 161353 THRU 161741.</p> <p><input type="checkbox"/> 7 161742 THRU 162414.</p> <p><input type="checkbox"/> 8 162415 AND UP.</p> <p><input type="checkbox"/> 9 161742 AND UP.</p>				

Figure 1. Material Index (Sheet 12)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y488.000 THROUGH Y518.000

EFFECTIVITY: 161742 AND UP

Reference Material

Fuel System A1-F18AC-460-300
 No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	2
Repairable Damage	2
Replacement	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorpor.	Remarks
F/A-18 IAFC 017	19 Jul 84	Fuel System Tank No. 4 Fuel Transfer Manifold, Modification of (ECP MDA-F/A-18-00084R1)	1 Oct 84	-

Support Equipment Required

None

Materials Required

None

1. **DAMAGE EVALUATION.** See figure 1.

2. The figure identifies types of material used. Data shown can be used to analyze damage.

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.

5. **REPLACEMENT.**

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).

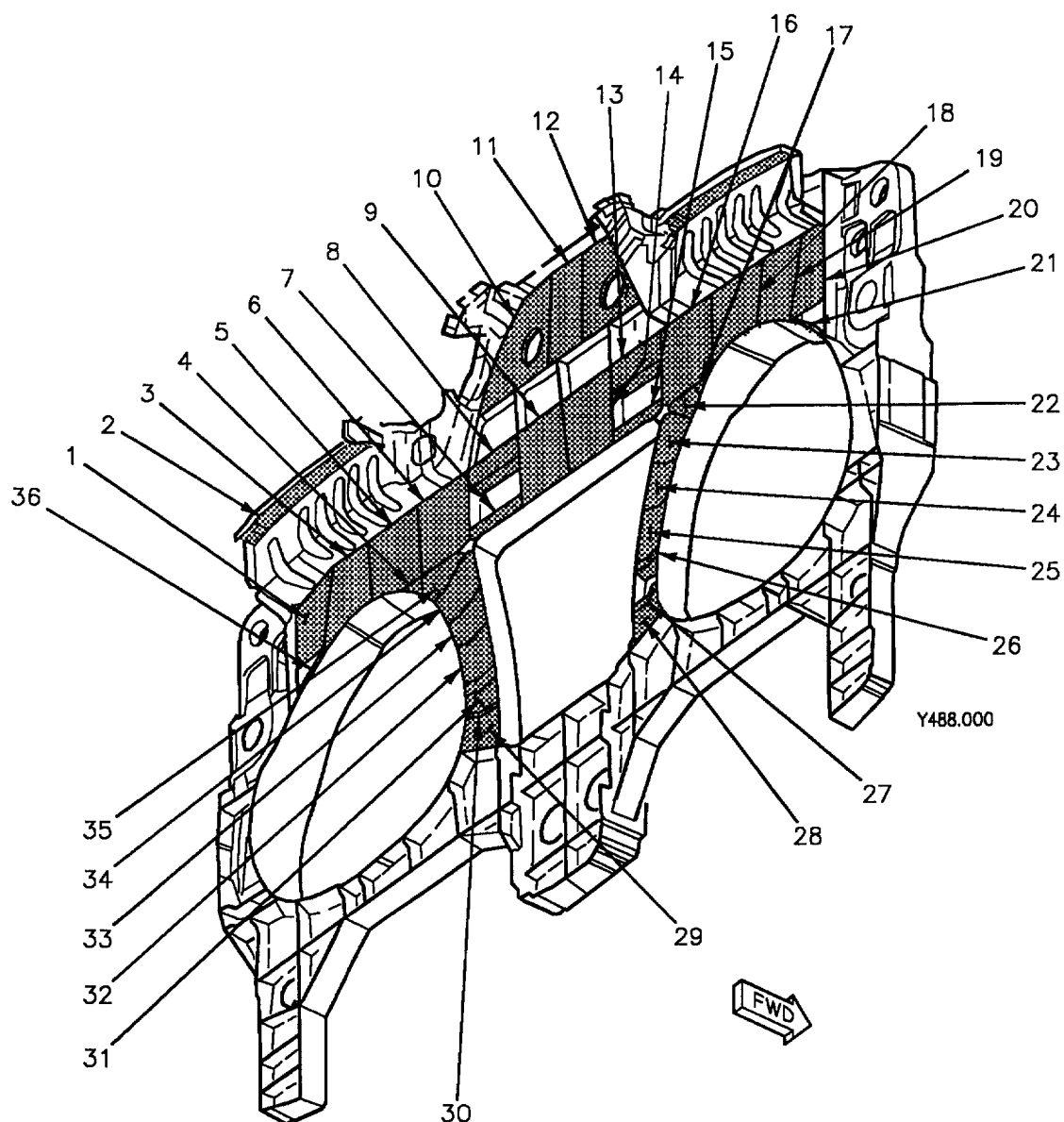


Figure 1. Material Index (Sheet 1)

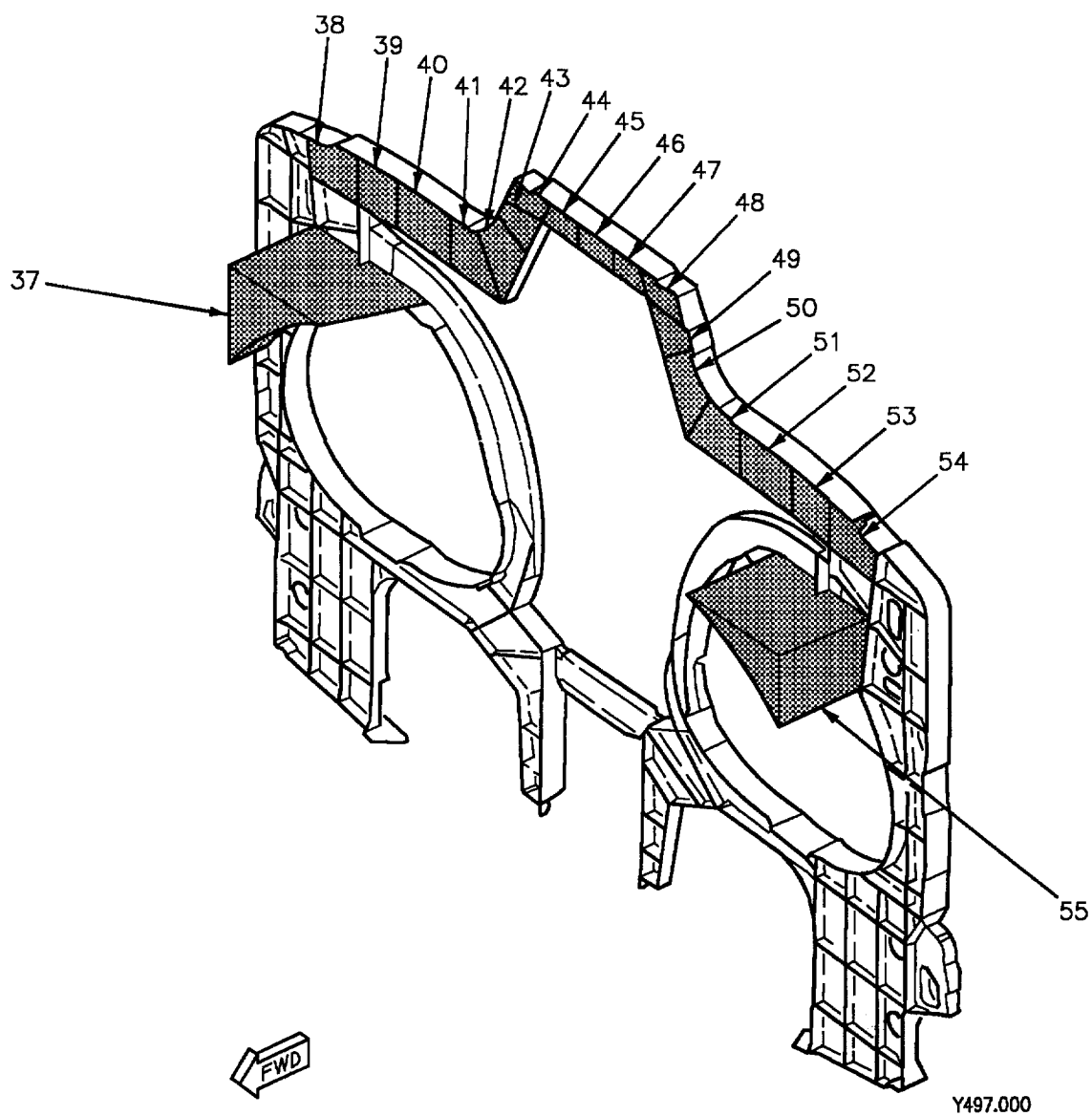


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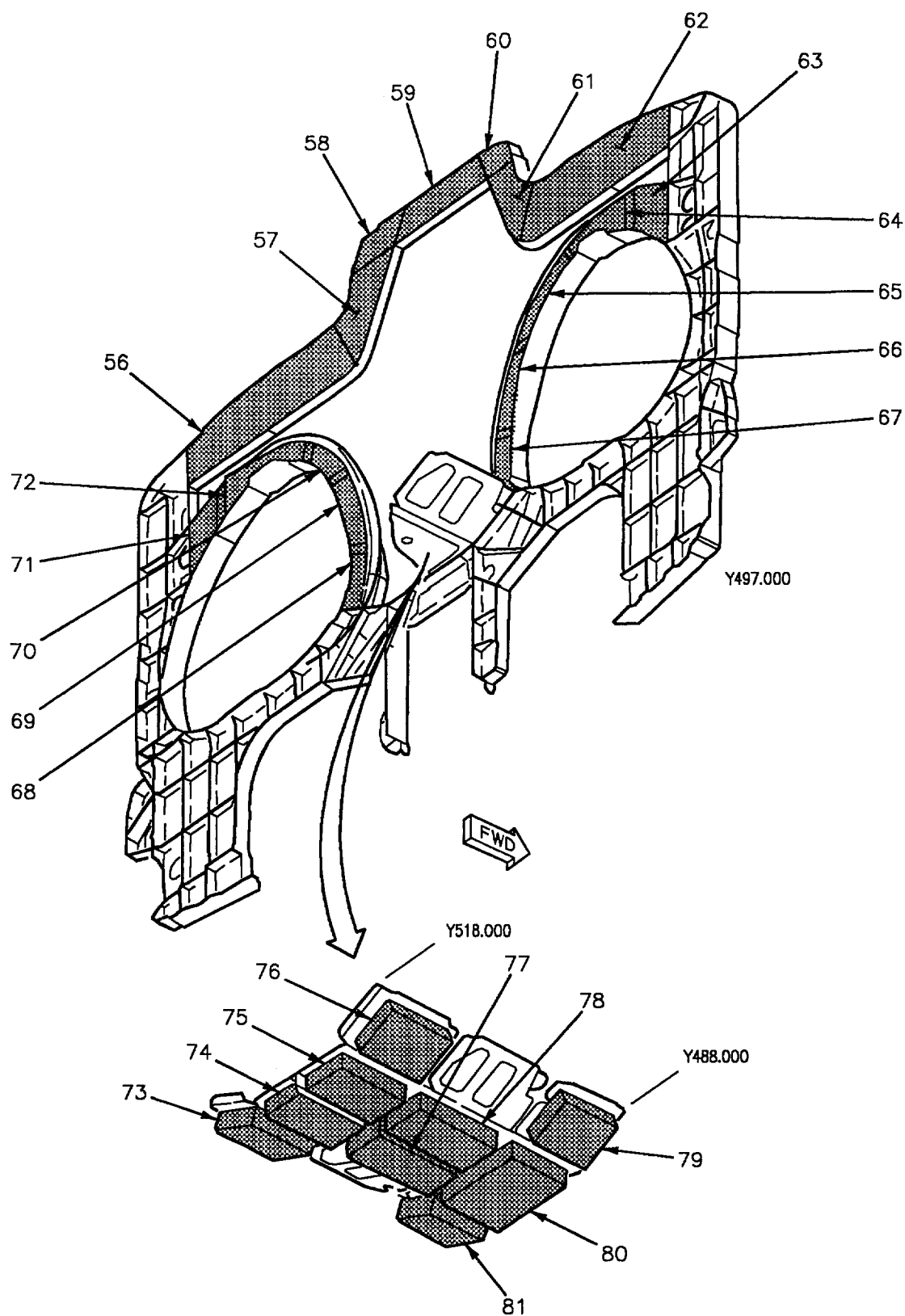


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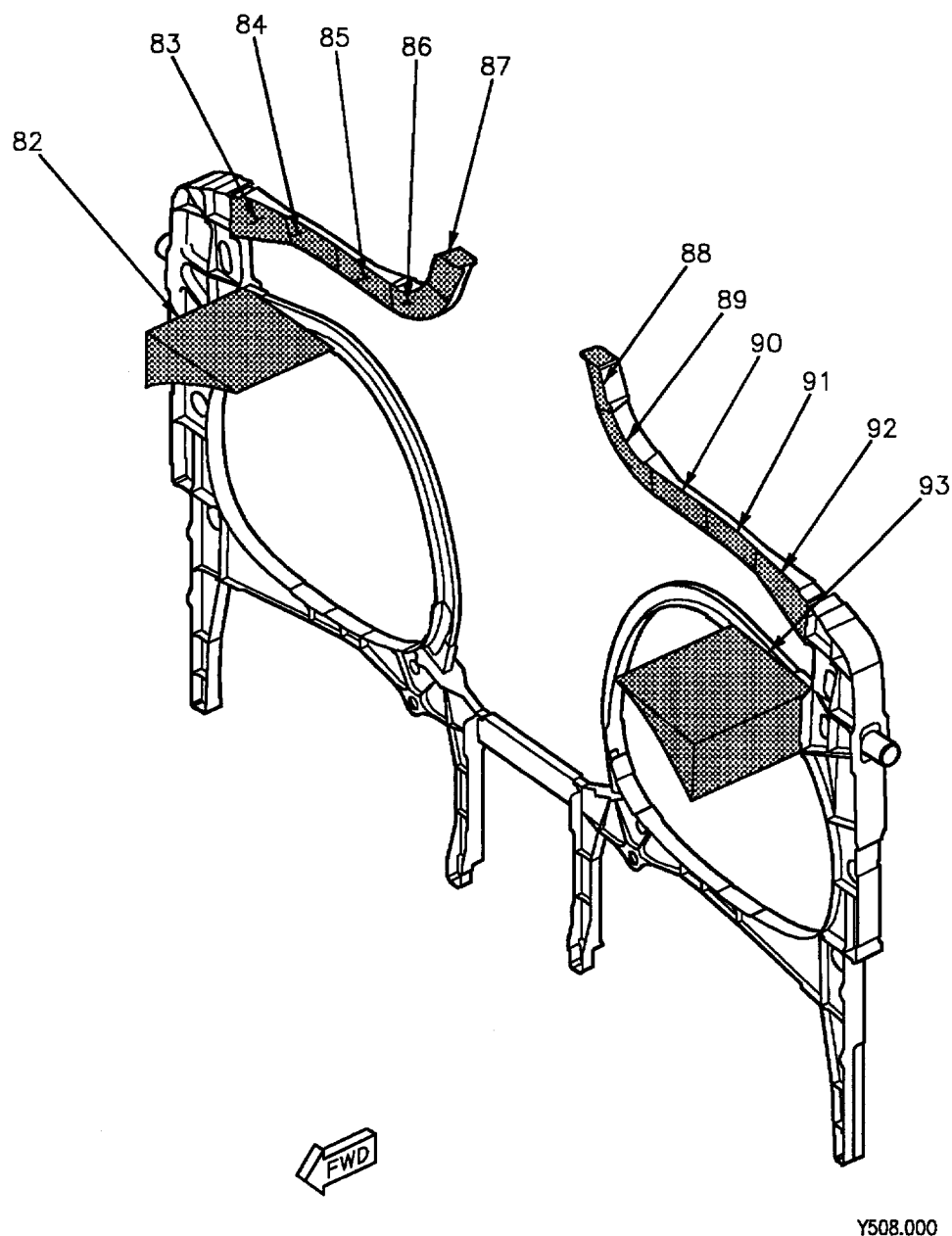


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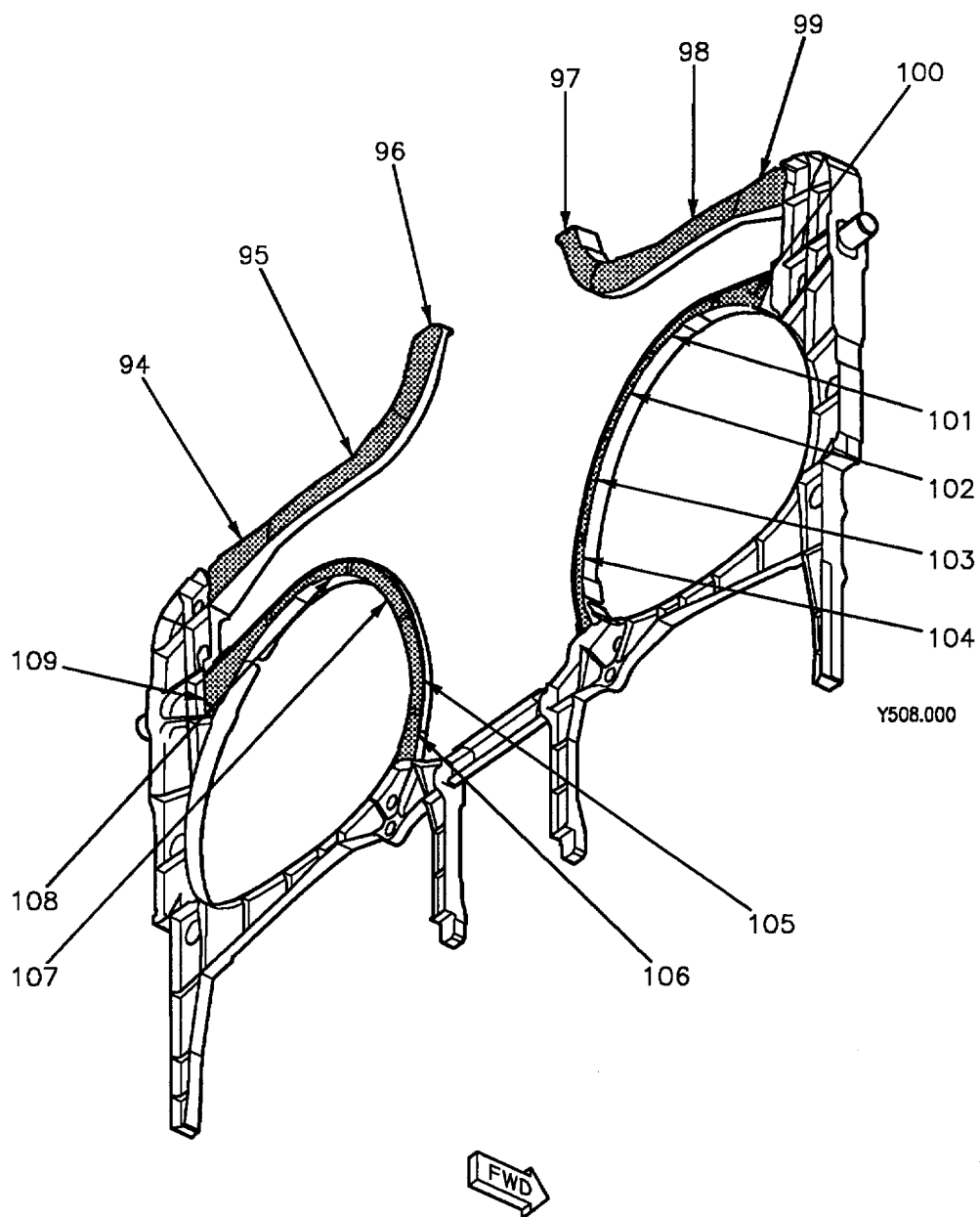


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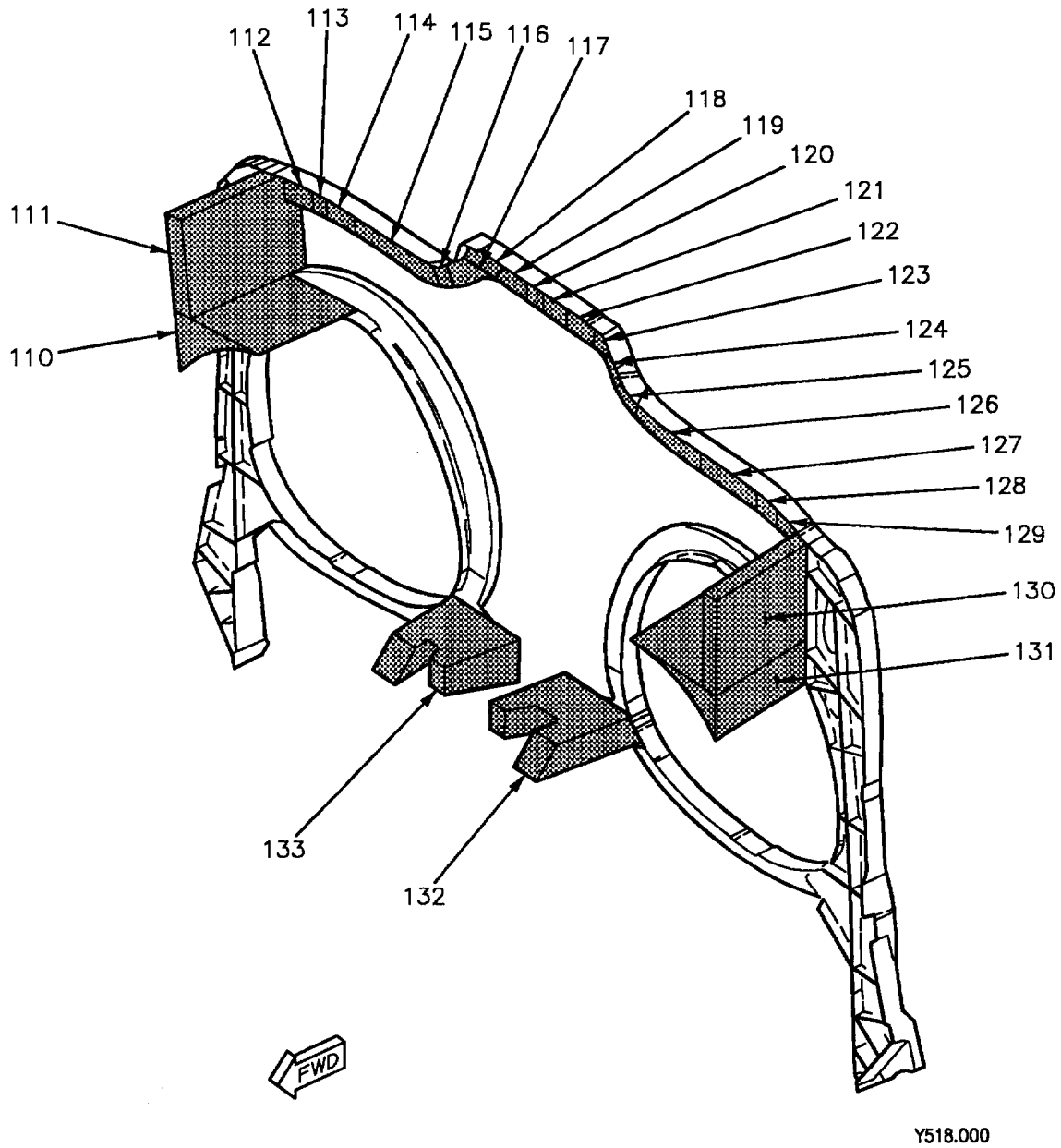


Figure 1. Material Index (Sheet 6)







































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2	 	Filler (Foam) 74A586400-3413 74A586400-9001	1.20 X 2.70 X 16.00 0.75 X 1.82 X 16.00	 
3		Filler (Foam) 74A586400-2047	1.00 X 4.25 X 6.75	 
4		Filler (Foam) 74A586400-3435	1.20 X 1.70 X 2.65	 
5		Filler (Foam) 74A586400-2045	1.00 X 7.25 X 7.50	 
6		Filler (Foam) 74A586400-2043	1.00 X 6.00 X 6.50	 
7		Filler (Foam) 74A586400-2041	1.00 X 0.50 X 6.25	 
8		Filler (Foam) 74A586300-2037	1.00 X 2.25 X 6.25	 
9		Filler (Foam) 74A586400-2039	1.00 X 5.50 X 6.50	 
10		Filler (Foam) 74A586400-2033	1.00 X 8.05 X 9.50	 
11		Filler (Foam) 74A586400-3473	1.15 X 4.35 X 9.50	 
12		Filler (Foam) 74A586400-2001	1.10 X 9.55 X 9.95	 
13		Filler (Foam) 74A586400-2005	1.00 X 2.25 X 6.25	 
14		Filler (Foam) 74A586400-2007	1.00 X 5.50 X 6.50	 
15		Filler (Foam) 74A586400-2009	1.00 X 0.50 X 6.25	 
16		Filler (Foam) 74A586400-2011	1.00 X 6.00 X 6.50	 
17		Filler (Foam) 74A586400-3436	1.20 X 1.70 X 2.65	 
18		Filler (Foam) 74A586400-2013	1.00 X 7.25 X 7.50	 

Figure 1. Material Index (Sheet 7)





































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20		Filler (Foam) 74A586400-3484	1.00 X 4.75 X 6.75	 
21		Filler (Foam) 74A586400-3434	1.20 X 1.70 X 11.35	 
22		Filler (Foam) 74A586400-2019	1.25 X 2.75 X 5.00	 
23		Filler (Foam) 74A586400-2021	1.38 X 4.62 X 4.62	 
24		Filler (Foam) 74A586400-2023	1.38 X 3.25 X 3.50	 
25		Filler (Foam) 74A586400-2025	1.38 X 2.75 X 4.50	 
26		Filler (Foam) 74A586400-2003	0.88 X 1.38 X 2.62	 
27		Filler (Foam) 74A586400-2027	0.88 X 1.38 X 2.88	 
28		Filler (Foam) 74A586400-2029	1.38 X 3.50 X 4.00	 
29		Filler (Foam) 74A586400-2061	1.38 X 3.50 X 4.00	 
30		Filler (Foam) 74A586400-2059	0.88 X 1.38 X 2.88	 
31		Filler (Foam) 74A586400-2035	0.88 X 1.38 X 2.62	 
32		Filler (Foam) 74A586400-2057	1.38 X 2.75 X 4.50	 
33		Filler (Foam) 74A586400-2055	1.38 X 3.25 X 3.50	 
34		Filler (Foam) 74A586400-2053	1.38 X 4.62 X 4.62	 
35		Filler (Foam) 74A586400-2051	1.25 X 2.75 X 5.00	 
36		Filler (Foam) 74A586400-3433	1.20 X 1.70 X 11.35	 

Figure 1. Material Index (Sheet 8)





































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38		Filler (Foam) 74A586400-3038	1.00 X 2.88 X 5.50	 
39		Filler (Foam) 74A586400-3036	0.75 X 2.25 X 5.25	 
40		Filler (Foam) 74A586400-3034	0.75 X 2.12 X 4.88	 
41		Filler (Foam) 74A586400-3032	0.88 X 2.62 X 4.88	 
42		Filler (Foam) 74A586400-3030	0.75 X 2.31 X 4.50	 
43		Filler (Foam) 74A586400-3028	0.81 X 2.19 X 3.88	 
44		Filler (Foam) 74A586400-3026	0.81 X 2.12 X 3.68	 
45		Filler (Foam) 74A586400-3024	0.69 X 1.62 X 4.50	 
46		Filler (Foam) 74A586400-3021	0.69 X 1.62 X 5.25	 
47		Filler (Foam) 74A586400-3023	0.69 X 1.62 X 4.50	 
48		Filler (Foam) 74A586400-3025	0.81 X 2.12 X 3.68	 
49		Filler (Foam) 74A586400-3027	0.81 X 2.19 X 3.88	 
50		Filler (Foam) 74A586400-3029	0.75 X 2.31 X 4.50	 
51		Filler (Foam) 74A586400-3031	0.88 X 2.62 X 4.88	 
52		Filler (Foam) 74A586400-3033	0.75 X 2.12 X 4.88	 
53		Filler (Foam) 74A586400-3035	0.75 X 2.25 X 5.25	 
54		Filler (Foam) 74A586400-3037	1.00 X 2.88 X 5.50	 

Figure 1. Material Index (Sheet 9)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
55		Filler (Foam) 74A586400-3295	2.63 X 6.25 X 8.25	 
56		Filler (Foam) 74A586400-3079	0.88 X 3.50 X 20.75	 
57		Filler (Foam) 74A586400-3075	0.88 X 2.50 X 8.62	 
58		Filler (Foam) 74A586400-3073	0.81 X 2.12 X 3.69	 
59		Filler (Foam) 74A586400-3071	0.50 X 1.62 X 15.00	 
60		Filler (Foam) 74A586400-3074	0.81 X 2.12 X 3.69	 
61		Filler (Foam) 74A586400-3076	0.88 X 2.50 X 8.62	 
62		Filler (Foam) 74A586400-3080	0.88 X 3.50 X 20.75	 
63		Filler (Foam) 74A586400-3012	0.75 X 1.50 X 5.55	 
64		Filler (Foam) 74A586400-3014	0.62 X 2.00 X 8.00	 
65		Filler (Foam) 74A586400-3016	0.62 X 1.81 X 8.31	 
66		Filler (Foam) 74A586400-3018	0.62 X 1.38 X 7.25	 
67		Filler (Foam) 74A586400-3020	0.62 X 2.00 X 6.50	 
68		Filler (Foam) 74A586400-3019	0.62 X 2.00 X 6.50	 
69		Filler (Foam) 74A586400-3017	0.62 X 1.38 X 7.25	 
70		Filler (Foam) 74A586400-3015	0.62 X 1.81 X 8.31	 
71		Filler (Foam) 74A586400-3011	0.75 X 1.50 X 5.55	 
72		Filler (Foam) 74A586400-3013	0.62 X 2.00 X 8.00	 

Figure 1. Material Index (Sheet 10)









































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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74	 	Filler (Foam) 74A585008-2145 74A585008-2157	-	 
75	 	Filler (Foam) 74A585008-2115 74A585008-2155	-	 
76		Filler (Foam) 74A585008-2124	-	 
77		Filler (Foam) 74A585008-2151	-	 
78		Filler (Foam) 74A585008-2153	-	 
79		Filler (Foam) 74A585008-2122	-	 
80		Filler (Foam) 74A585008-2111	-	 
81		Filler (Foam) 74A585008-2137	-	 
82		Filler (Foam) 74A586400-3298	7.00 X 10.25 X 10.75	 
83		Filler (Foam) 74A586400-3060	0.88 X 3.00 X 7.00	 
84		Filler (Foam) 74A586400-3062	0.75 X 2.25 X 5.81	 
85		Filler (Foam) 74A586400-3064	0.75 X 2.12 X 6.38	 
86		Filler (Foam) 74A586400-3066	0.75 X 2.62 X 7.50	 
87		Filler (Foam) 74A586400-3068	0.75 X 2.12 X 4.19	 
88		Filler (Foam) 74A586400-3067	0.75 X 2.12 X 4.19	 
89		Filler (Foam) 74A586400-3065	0.75 X 2.62 X 7.50	 

Figure 1. Material Index (Sheet 11)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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91		Filler (Foam) 74A586400-3061	0.75 X 2.25 X 5.81	 
92		Filler (Foam) 74A586400-3059	0.88 X 3.00 X 7.00	 
93		Filler (Foam) 74A586400-3297	7.00 X 10.25 X 10.75	 
94		Filler (Foam) 74A586400-3049	0.88 X 3.00 X 7.00	 
95		Filler (Foam) 74A586400-3051	0.88 X 2.81 X 16.50	 
96		Filler (Foam) 74A586400-3053	0.88 X 2.25 X 7.50	 
97		Filler (Foam) 74A586400-3054	0.88 X 2.25 X 7.50	 
98		Filler (Foam) 74A586400-3052	0.88 X 2.81 X 16.50	 
99		Filler (Foam) 74A586400-3050	0.88 X 3.00 X 7.00	 
100		Filler (Foam) 74A586400-3048	0.69 X 4.12 X 11.62	 
101		Filler (Foam) 74A586400-3046	0.69 X 2.00 X 9.25	 
102		Filler (Foam) 74A586400-3044	0.69 X 1.25 X 5.50	 
103		Filler (Foam) 74A586400-3042	0.69 X 1.31 X 6.25	 
104		Filler (Foam) 74A586400-3040	0.69 X 2.19 X 6.00	 
105		Filler (Foam) 74A586400-3041	0.69 X 1.31 X 6.25	 
106		Filler (Foam) 74A586400-3039	0.69 X 2.19 X 6.00	 
107		Filler (Foam) 74A586400-3043	0.69 X 1.25 X 5.50	 

Figure 1. Material Index (Sheet 12)

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109		Filler (Foam) 74A586400-3047	0.69 X 4.12 X 11.62	<input type="text" value="1"/> <input type="text" value="2"/>
110		Filler (Foam) 74A586400-3300	5.00 X 9.25 X 10.75	<input type="text" value="1"/> <input type="text" value="2"/>
111		Filler (Foam) 74A586400-3450	2.25 X 13.00 X 10.00	<input type="text" value="1"/> <input type="text" value="2"/>
112		Filler (Foam) 74A586400-3102	1.00 X 3.00 X 6.25	<input type="text" value="1"/> <input type="text" value="2"/>
113		Filler (Foam) 74A586400-3104	0.75 X 2.12 X 3.25	<input type="text" value="1"/> <input type="text" value="2"/>
114		Filler (Foam) 74A586400-3106	0.75 X 2.12 X 5.75	<input type="text" value="1"/> <input type="text" value="2"/>
115		Filler (Foam) 74A586400-3108	0.75 X 2.25 X 5.75	<input type="text" value="1"/> <input type="text" value="2"/>
116		Filler (Foam) 74A586400-3110	0.75 X 2.00 X 3.38	<input type="text" value="1"/> <input type="text" value="2"/>
117		Filler (Foam) 74A586400-3112	0.75 X 2.00 X 4.00	<input type="text" value="1"/> <input type="text" value="2"/>
118		Filler (Foam) 74A586400-3114	0.75 X 1.62 X 4.00	<input type="text" value="1"/> <input type="text" value="2"/>
119		Filler (Foam) 74A586400-3116	0.75 X 1.62 X 3.62	<input type="text" value="1"/> <input type="text" value="2"/>
120		Filler (Foam) 74A586400-3118	0.75 X 1.62 X 2.62	<input type="text" value="1"/> <input type="text" value="2"/>
121		Filler (Foam) 74A586400-3117	0.75 X 1.62 X 2.62	<input type="text" value="1"/> <input type="text" value="2"/>
122		Filler (Foam) 74A586400-3115	0.75 X 1.62 X 3.62	<input type="text" value="1"/> <input type="text" value="2"/>
123		Filler (Foam) 74A586400-3113	0.75 X 1.62 X 4.00	<input type="text" value="1"/> <input type="text" value="2"/>
124		Filler (Foam) 74A586400-3111	0.75 X 2.00 X 4.00	<input type="text" value="1"/> <input type="text" value="2"/>
125		Filler (Foam) 74A586400-3109	0.75 X 2.00 X 3.38	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 13)
























Idx No.	Eft	Nomenclature and Part No.	Description	Material
126		Filler (Foam) 74A586400-3107	0.75 X 2.25 X 5.75	 
127		Filler (Foam) 74A586400-3105	0.75 X 2.12 X 5.75	 
128		Filler (Foam) 74A586400-3103	0.75 X 2.12 X 3.25	 
129		Filler (Foam) 74A586400-3101	1.00 X 3.00 X 6.25	 
130		Filler (Foam) 74A586400-3449	2.25 X 13.00 X 10.00	 
131		Filler (Foam) 74A586400-3299	5.00 X 9.25 X 10.75	 
132		Filler (Foam) 74A586400-3453	4.80 X 6.25 X 10.50	 
133		Filler (Foam) 74A586400-3455	4.80 X 7.20 X 10.60	 
<p style="text-align: center;">LEGEND</p> <p> Bond foam using EC-847 adhesive, 3M Company, St. Paul, Minn. 04963.</p> <p> Make from PPP-C-1752, type 1, 2 pounds per cu. ft., Class III.</p> <p> Make from basil laminated sandwich panel, 1.7 +0.001 -0.000. inches thick.</p> <p> 161742 THRU 161965.</p> <p> 161966 AND UP.</p> <p> 161742 THRU 161982.</p> <p> 161983 AND UP; ALSO 161742 THRU 161987 AFTER F/A-18 IAFC-017.</p>				

Figure 1. Material Index (Sheet 14)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y518.000 THROUGH Y557.500

EFFECTIVITY: 161353 THRU 161741

Reference Material

Fuel System A1-F18AC-460-300
No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.1. **DAMAGE EVALUATION.** See Figure 1.

2. The figure identifies types of material used. Data shown can be used to analyze damage.

5. **REPLACEMENT.**

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).

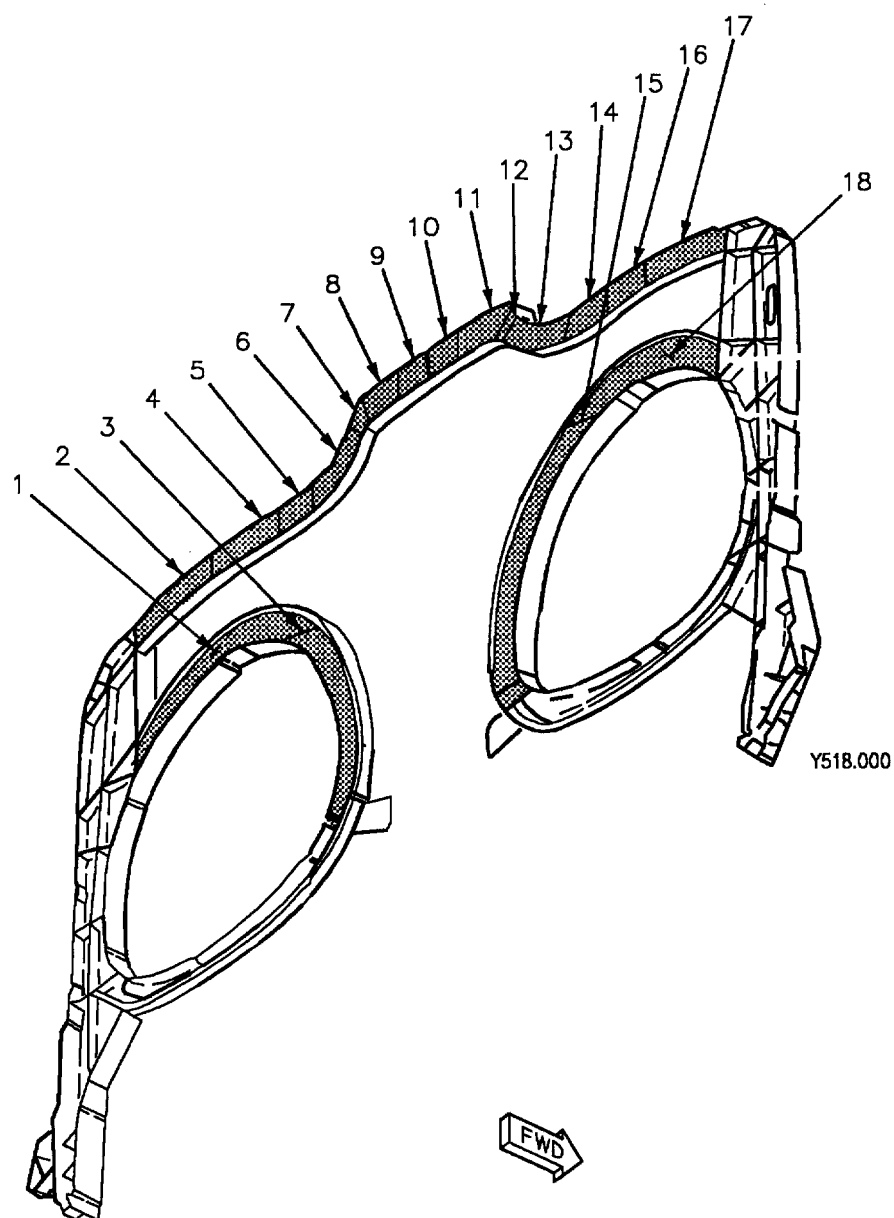


Figure 1. Material Index (Sheet 1)

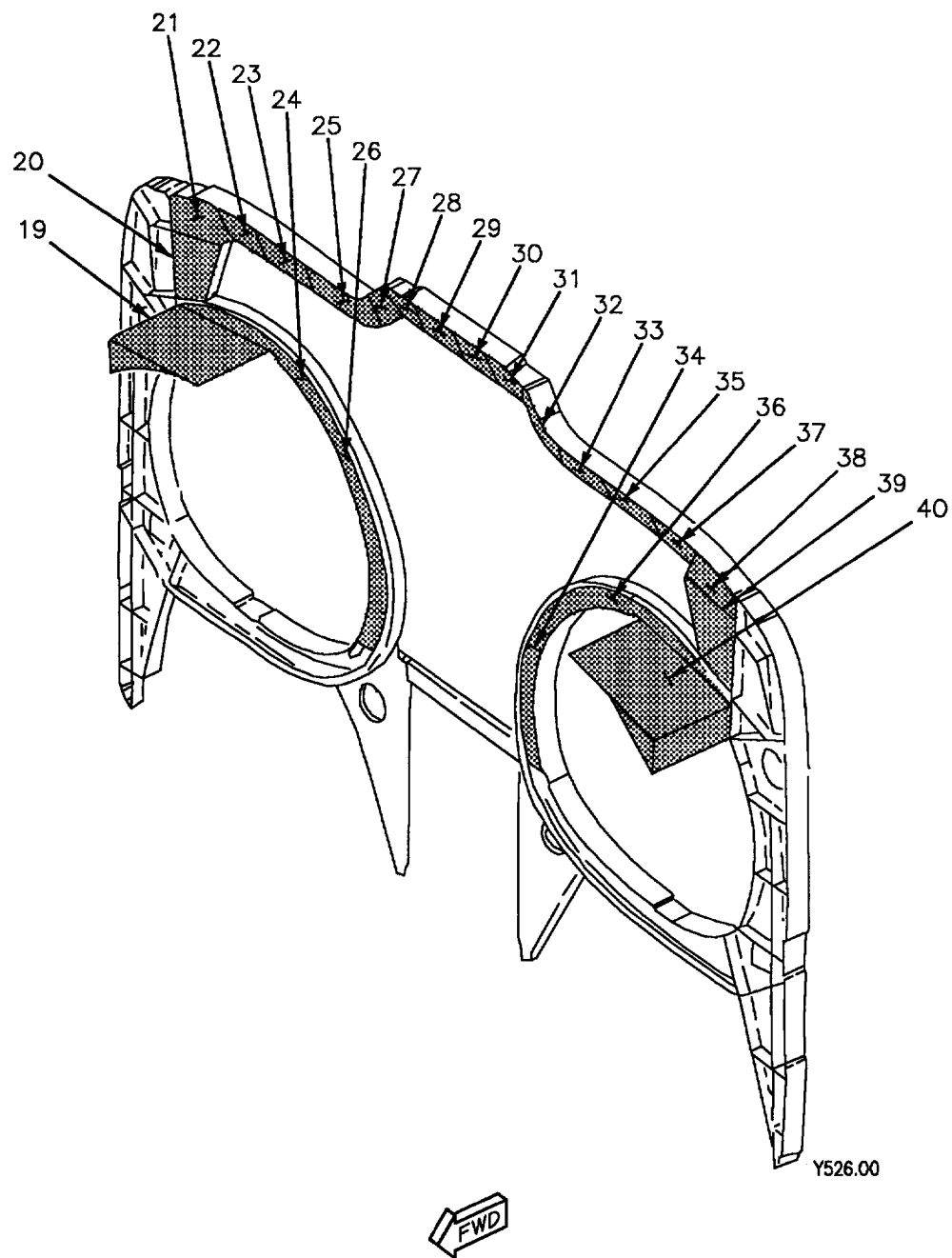


Figure 1. Material Index (Sheet 2)

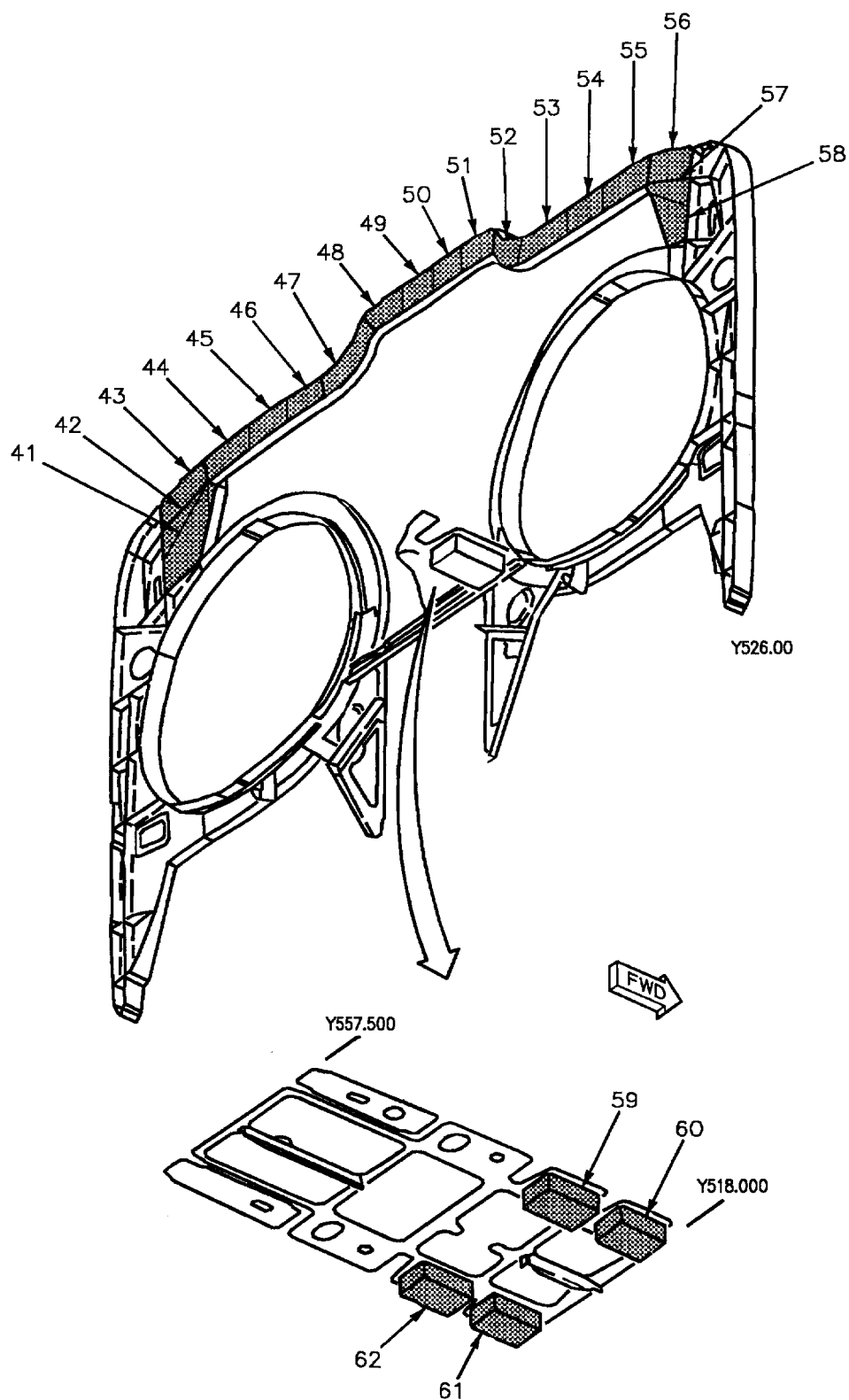


Figure 1. Material Index (Sheet 3)

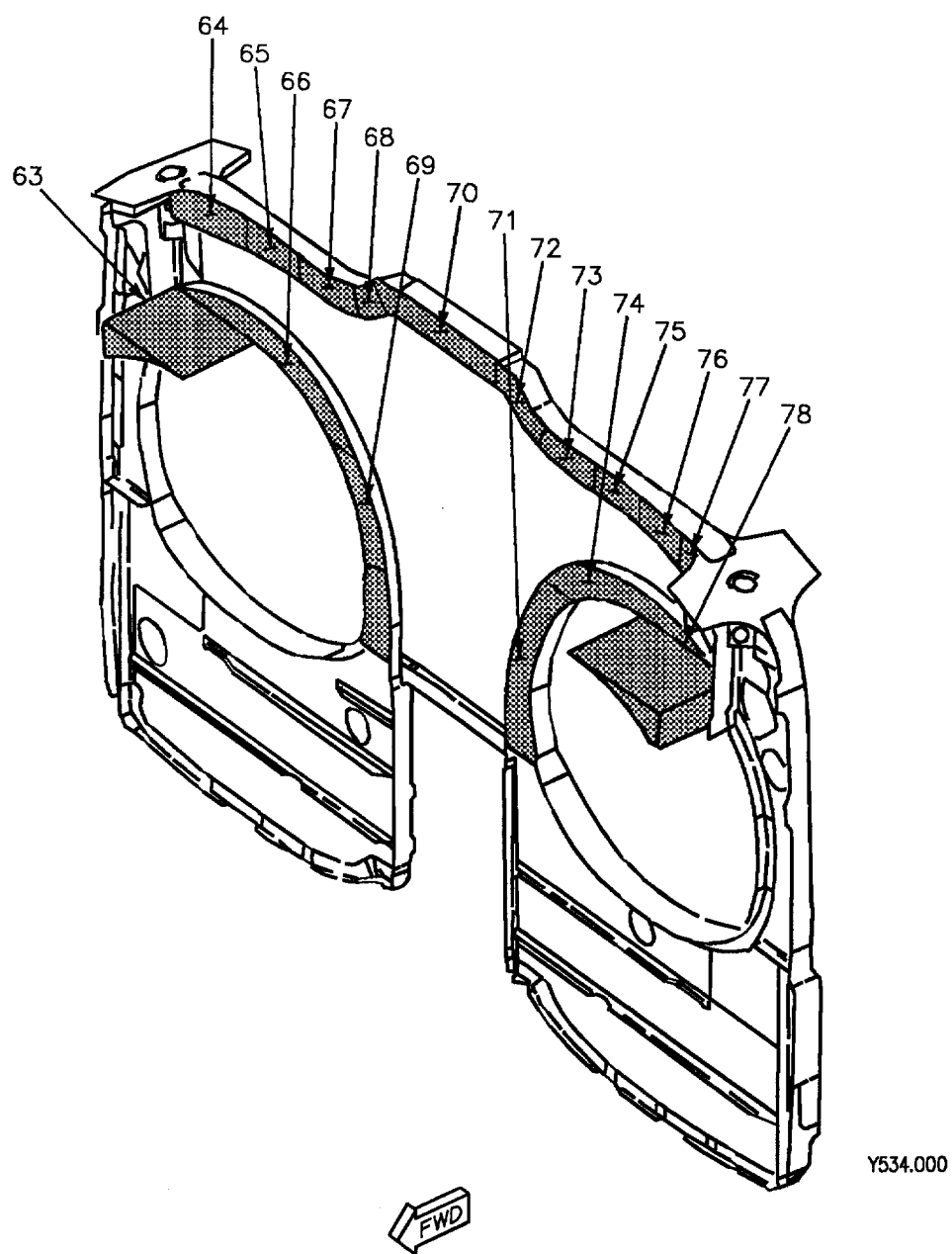


Figure 1. Material Index (Sheet 4)

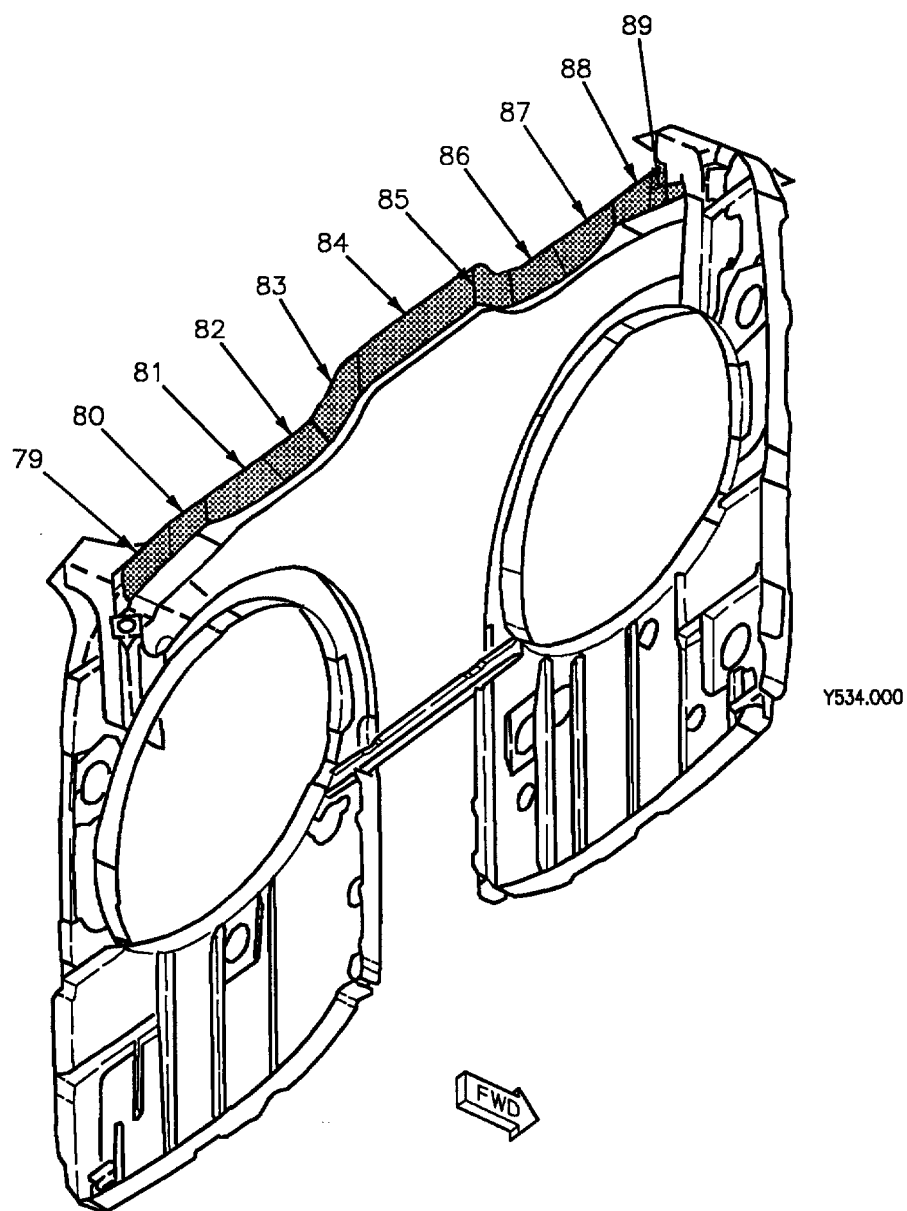


Figure 1. Material Index (Sheet 5)

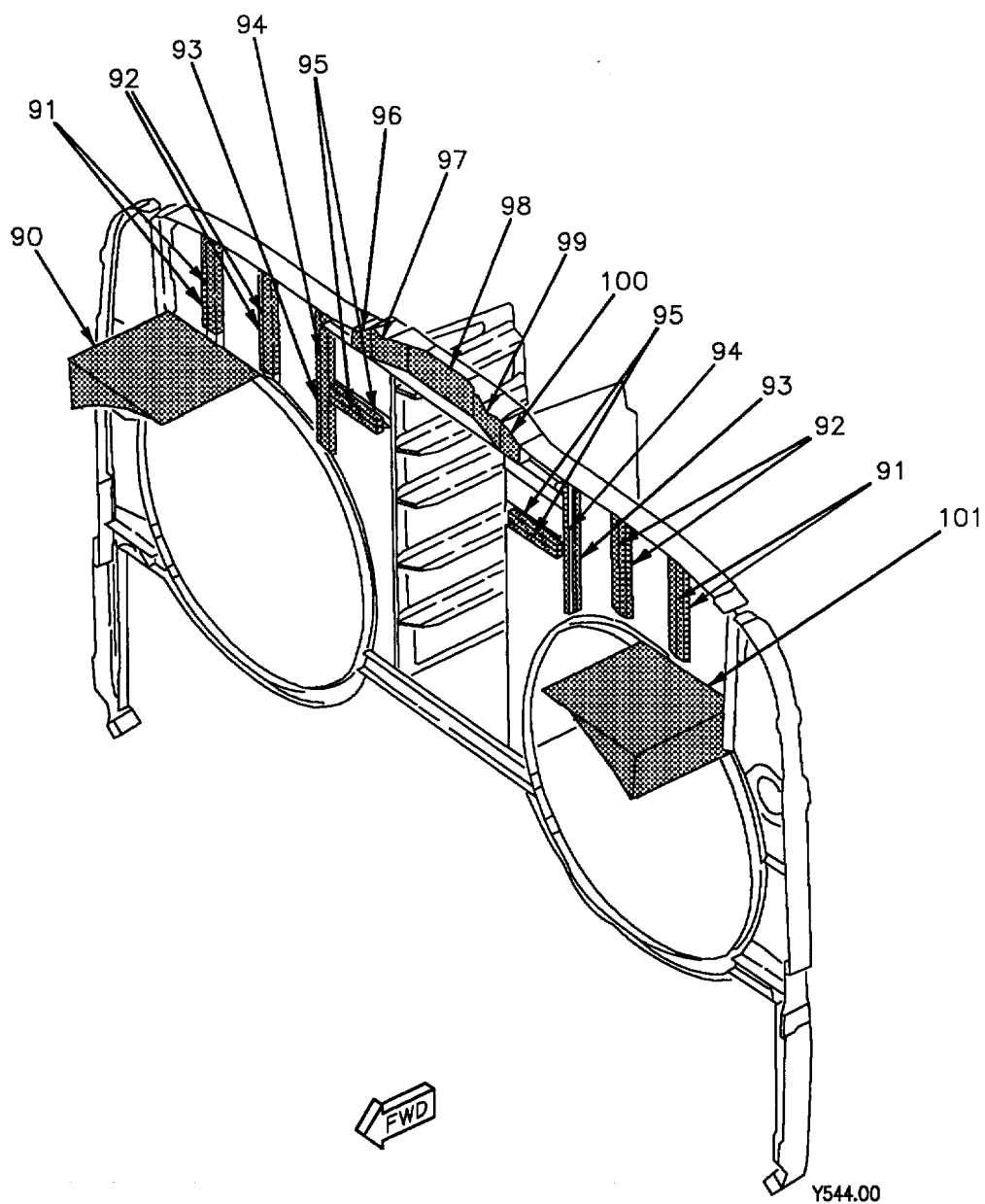


Figure 1. Material Index (Sheet 6)

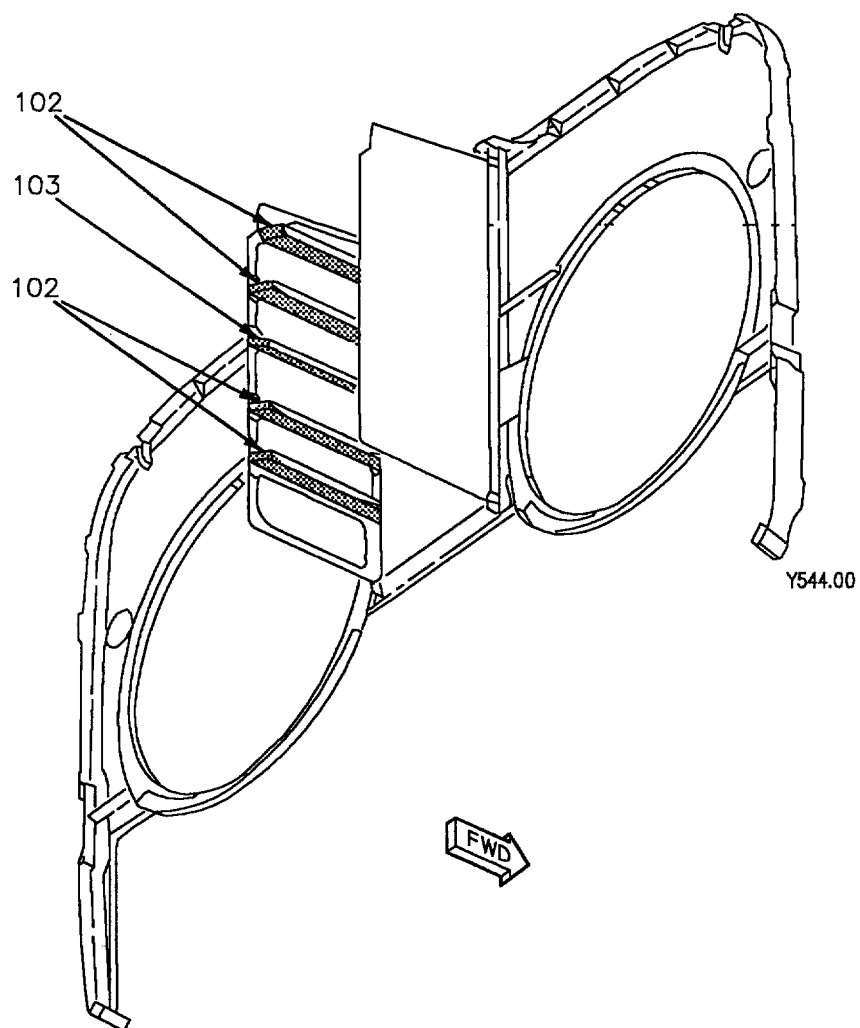


Figure 1. Material Index (Sheet 7)

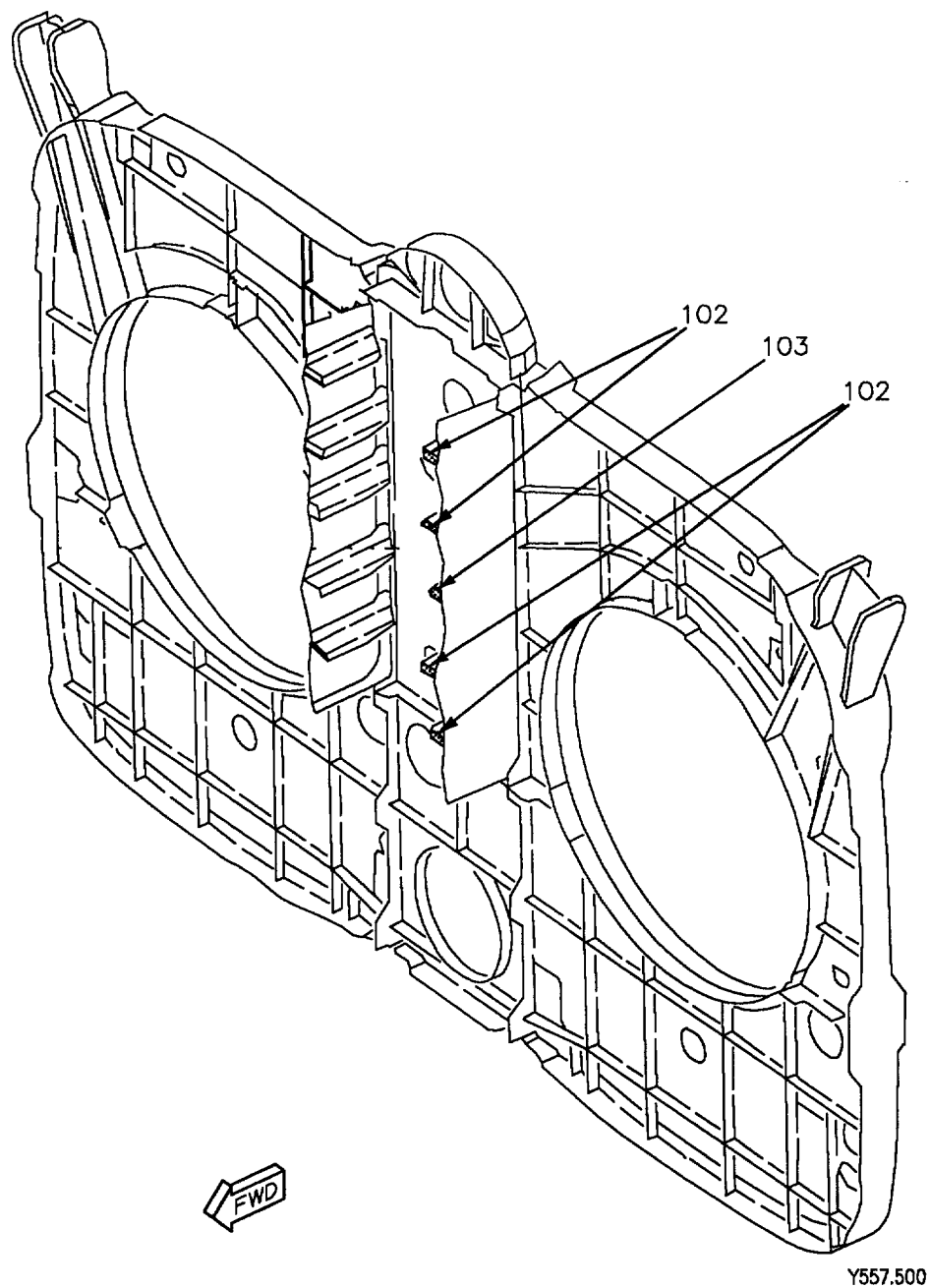


Figure 1. Material Index (Sheet 8)

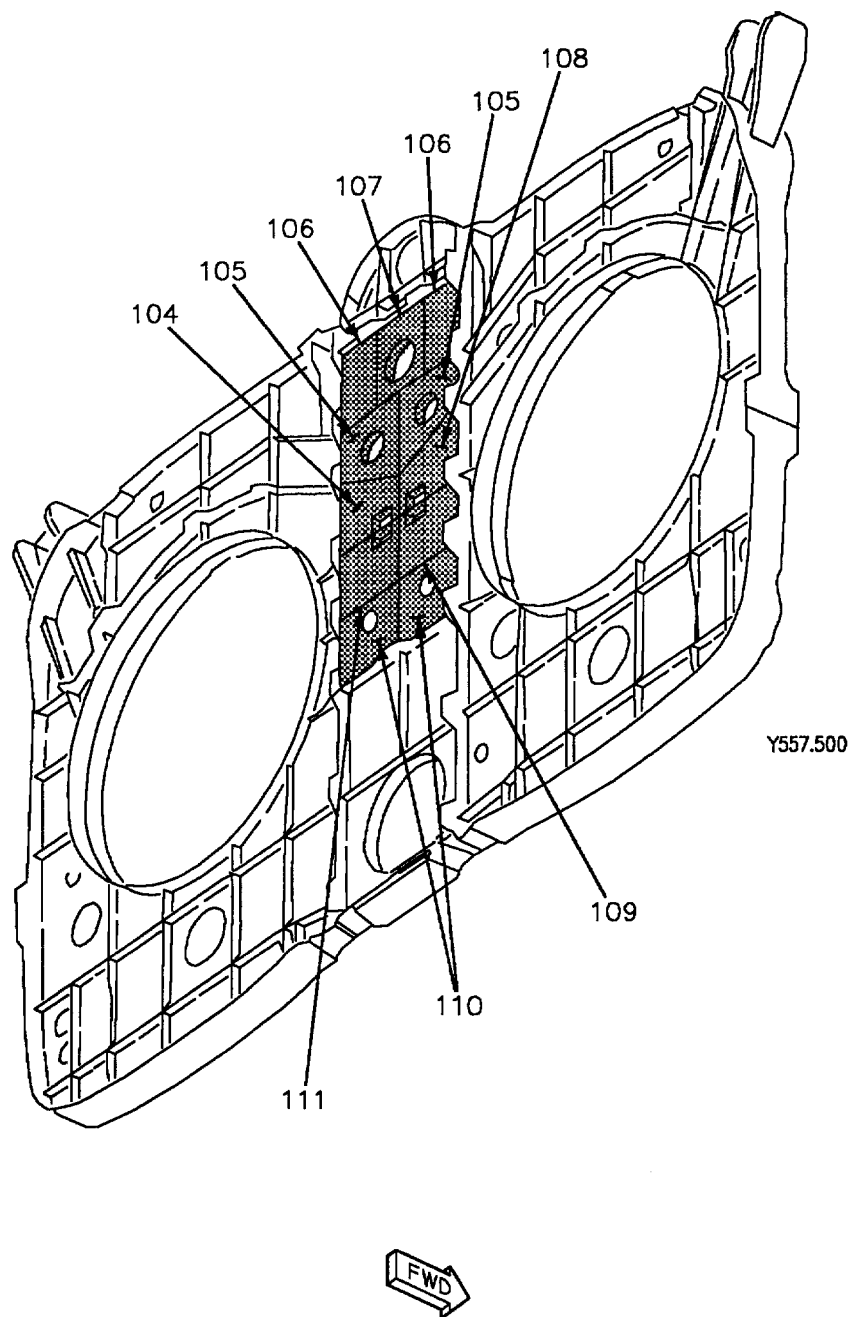


Figure 1. Material Index (Sheet 9)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Filler (Foam) 74A586400-2775	1.10 X 3.95 X 24.15	<input type="checkbox"/> 1 <input type="checkbox"/> 2
2		Filler (Foam) 74A586400-2987		<input type="checkbox"/> 1 <input type="checkbox"/> 2
3		Filler (Foam) 74A586400-2777	1.10 X 2.25 X 19.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
4		Filler (Foam) 74A586400-2985		<input type="checkbox"/> 1 <input type="checkbox"/> 2
5		Filler (Foam) 74A586400-2983		<input type="checkbox"/> 1 <input type="checkbox"/> 2
6		Filler (Foam) 74A586400-2981		<input type="checkbox"/> 1 <input type="checkbox"/> 2
7		Filler (Foam) 74A586400-2979		<input type="checkbox"/> 1 <input type="checkbox"/> 2
8		Filler (Foam) 74A586400-2977		<input type="checkbox"/> 1 <input type="checkbox"/> 2
9		Filler (Foam) 74A586400-2975		<input type="checkbox"/> 1 <input type="checkbox"/> 2
10		Filler (Foam) 74A586400-2973		<input type="checkbox"/> 1 <input type="checkbox"/> 2
11		Filler (Foam) 74A586400-2971		<input type="checkbox"/> 1 <input type="checkbox"/> 2
12		Filler (Foam) 74A586400-2969		<input type="checkbox"/> 1 <input type="checkbox"/> 2
13		Filler (Foam) 74A586400-2967		<input type="checkbox"/> 1 <input type="checkbox"/> 2
14		Filler (Foam) 74A586400-2965		<input type="checkbox"/> 1 <input type="checkbox"/> 2
15		Filler (Foam) 74A586400-2743	1.10 X 2.25 X 19.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
16		Filler (Foam) 74A586400-2963		<input type="checkbox"/> 1 <input type="checkbox"/> 2
17		Filler (Foam) 74A586400-2961		<input type="checkbox"/> 1 <input type="checkbox"/> 2
18		Filler (Foam) 74A586400-2745	1.10 X 3.95 X 24.15	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 10)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
19		Filler (Foam) 74A586400-2888	4.45 X 6.15 X 10.65	<input type="text" value="1"/> <input type="text" value="2"/>
20		Filler (Foam) 74A586400-2841	1.00 X 5.35 X 8.55	<input type="text" value="1"/> <input type="text" value="2"/>
21		Filler (Foam) 74A586400-2839	0.90 X 3.35 X 6.70	<input type="text" value="1"/> <input type="text" value="2"/>
22		Filler (Foam) 74A586400-2837	1.00 X 2.80 X 6.05	<input type="text" value="1"/> <input type="text" value="2"/>
23		Filler (Foam) 74A586400-2835	0.90 X 2.75 X 5.90	<input type="text" value="1"/> <input type="text" value="2"/>
24		Filler (Foam) 74A586400-2843	1.25 X 4.35 X 12.30	<input type="text" value="1"/> <input type="text" value="2"/>
25		Filler (Foam) 74A586400-2833	1.00 X 2.95 X 6.85	<input type="text" value="1"/> <input type="text" value="2"/>
26		Filler (Foam) 74A586400-2845	1.00 X 2.35 X 18.70	<input type="text" value="1"/> <input type="text" value="2"/>
27		Filler (Foam) 74A586400-2831	1.00 X 4.15 X 6.65	<input type="text" value="1"/> <input type="text" value="2"/>
28		Filler (Foam) 74A586400-2829	1.05 X 2.85 X 4.85	<input type="text" value="1"/> <input type="text" value="2"/>
29		Filler (Foam) 74A586400-2827	1.00 X 3.15 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
30		Filler (Foam) 74A586400-2825	1.00 X 3.05 X 4.50	<input type="text" value="1"/> <input type="text" value="2"/>
31		Filler (Foam) 74A586400-2823	1.05 X 2.85 X 4.85	<input type="text" value="1"/> <input type="text" value="2"/>
32		Filler (Foam) 74A586400-2821	1.00 X 4.15 X 6.65	<input type="text" value="1"/> <input type="text" value="2"/>
33		Filler (Foam) 74A586400-2819	1.00 X 2.95 X 6.85	<input type="text" value="1"/> <input type="text" value="2"/>
34		Filler (Foam) 74A586400-2807	1.00 X 2.35 X 18.70	<input type="text" value="1"/> <input type="text" value="2"/>
35		Filler (Foam) 74A586400-2817	0.90 X 2.75 X 5.90	<input type="text" value="1"/> <input type="text" value="2"/>
36		Filler (Foam) 74A586400-2809	1.05 X 4.35 X 12.30	<input type="text" value="1"/> <input type="text" value="2"/>

Figure 1. Material Index (Sheet 11)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
37		Filler (Foam) 74A586400-2815	1.00 X 2.80 X 6.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
38		Filler (Foam) 74A586400-2813	0.90 X 3.35 X 6.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
39		Filler (Foam) 74A586400-2811	1.00 X 5.35 X 8.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
40		Filler (Foam) 74A586400-2887	4.45 X 6.15 X 10.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
41		Filler (Foam) 74A586400-2881	1.05 X 6.10 X 8.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
42		Filler (Foam) 74A586400-2879		<input type="checkbox"/> 1 <input type="checkbox"/> 2
43		Filler (Foam) 74A586400-2877	1.05 X 3.70 X 6.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
44		Filler (Foam) 74A586400-2875	0.85 X 2.35 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
45		Filler (Foam) 74A586400-2873	0.90 X 2.75 X 6.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2
46		Filler (Foam) 74A586400-2871	1.00 X 2.65 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
47		Filler (Foam) 74A586400-2869	0.90 X 3.30 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
48		Filler (Foam) 74A586400-2867	1.00 X 2.55 X 4.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
49		Filler (Foam) 74A586400-2865	1.00 X 2.55 X 4.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
50		Filler (Foam) 74A586400-2863	1.00 X 2.55 X 4.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
51		Filler (Foam) 74A586400-2861	1.00 X 2.55 X 4.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
52		Filler (Foam) 74A586400-2859	0.90 X 3.30 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
53		Filler (Foam) 74A586400-2857	1.00 X 2.65 X 6.35	<input type="checkbox"/> 1 <input type="checkbox"/> 2
54		Filler (Foam) 74A586400-2855	0.90 X 2.75 X 6.00	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 12)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
55		Filler (Foam) 74A586400-2853	0.85 X 2.35 X 5.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
56		Filler (Foam) 74A586400-2851	1.00 X 3.45 X 6.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
57		Filler (Foam) 74A586400-2849		<input type="checkbox"/> 1 <input type="checkbox"/> 2
58		Filler (Foam) 74A586400-2847	1.05 X 6.10 X 8.05	<input type="checkbox"/> 1 <input type="checkbox"/> 2
59	<input type="checkbox"/> 3 <input type="checkbox"/> 4	Filler (Foam) 74A585008-2044 74A585008-2097		<input type="checkbox"/> 1 <input type="checkbox"/> 2
60	<input type="checkbox"/> 3 <input type="checkbox"/> 4	Filler (Foam) 74A585008-2042 74A585008-2095		<input type="checkbox"/> 1 <input type="checkbox"/> 2
61	<input type="checkbox"/> 3 <input type="checkbox"/> 4	Filler (Foam) 74A585008-2041 74A585008-2093		<input type="checkbox"/> 1 <input type="checkbox"/> 2
62		Filler (Foam) 74A585008-2043		<input type="checkbox"/> 1 <input type="checkbox"/> 2
63		Filler (Foam) 74A586400-2886	4.30 X 7.15 X 10.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
64		Filler (Foam) 74A586400-2657	1.00 X 3.05 X 11.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
65		Filler (Foam) 74A586400-2655	0.90 X 2.95 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
66		Filler (Foam) 74A586400-2659	1.15 X 4.35 X 24.30	<input type="checkbox"/> 1 <input type="checkbox"/> 2
67		Filler (Foam) 74A586400-2653	1.00 X 3.45 X 7.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
68		Filler (Foam) 74A586400-2651	0.85 X 3.15 X 5.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
69		Filler (Foam) 74A586400-2661	1.15 X 4.55 X 18.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
70		Filler (Foam) 74A586400-2649	0.90 X 2.50 X 16.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
71		Filler (Foam) 74A586400-2635	1.15 X 4.55 X 18.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 13)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
72		Filler (Foam) 74A586400-2647	0.85 X 3.15 X 5.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
73		Filler (Foam) 74A586400-2645	1.00 X 3.45 X 7.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
74		Filler (Foam) 74A586400-2643	0.90 X 2.95 X 6.75	<input type="checkbox"/> 1 <input type="checkbox"/> 2
75		Filler (Foam) 74A586400-2637	1.15 X 4.35 X 24.30	<input type="checkbox"/> 1 <input type="checkbox"/> 2
76		Filler (Foam) 74A586400-2641		<input type="checkbox"/> 1 <input type="checkbox"/> 2
77		Filler (Foam) 74A586400-2639	1.00 X 3.05 X 11.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
78		Filler (Foam) 74A586400-2885	4.30 X 7.15 X 10.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
79		Filler (Foam) 74A586400-2683	1.00 X 3.45 X 10.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2
80		Filler (Foam) 74A586400-2681		<input type="checkbox"/> 1 <input type="checkbox"/> 2
81		Filler (Foam) 74A586400-2679	0.90 X 2.80 X 6.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
82		Filler (Foam) 74A586400-2677	1.00 X 3.20 X 7.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
83		Filler (Foam) 74A586400-2675	1.00 X 2.50 X 4.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
84		Filler (Foam) 74A586400-2673	1.00 X 2.45 X 16.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
85		Filler (Foam) 74A586400-2671	1.00 X 2.50 X 4.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
86		Filler (Foam) 74A586400-2669	1.00 X 3.20 X 7.25	<input type="checkbox"/> 1 <input type="checkbox"/> 2
87		Filler (Foam) 74A586400-2667	0.90 X 2.80 X 6.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
88		Filler (Foam) 74A586400-2665		<input type="checkbox"/> 1 <input type="checkbox"/> 2
89		Filler (Foam) 74A586400-2663	1.00 X 3.45 X 10.50	<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 14)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
90		Filler (Foam) 74A586400-2884	4.10 X 10.15 X 10.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
91		Filler (Foam) 74A586400-2791	0.50 X 1.75 X 16.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
92		Filler (Foam) 74A586400-2793	0.50 X 1.75 X 11.20	<input type="checkbox"/> 1 <input type="checkbox"/> 2
93		Filler (Foam) 74A586400-2789	1.00 X 1.15 X 13.99	<input type="checkbox"/> 1 <input type="checkbox"/> 2
94		Filler (Foam) 74A586400-2787	0.50 X 1.45 X 13.99	<input type="checkbox"/> 1 <input type="checkbox"/> 2
95		Filler (Foam) 74A586400-2795	0.50 X 1.65 X 7.90	<input type="checkbox"/> 1 <input type="checkbox"/> 2
96		Filler (Foam) 74A586400-2805	0.70 X 3.95 X 8.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
97		Filler (Foam) 74A586400-2803	0.90 X 3.25 X 3.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
98		Filler (Foam) 74A586400-2801	0.80 X 2.55 X 7.85	<input type="checkbox"/> 1 <input type="checkbox"/> 2
99		Filler (Foam) 74A586400-2799	0.90 X 3.25 X 3.70	<input type="checkbox"/> 1 <input type="checkbox"/> 2
100		Filler (Foam) 74A586400-2797	0.70 X 3.95 X 8.55	<input type="checkbox"/> 1 <input type="checkbox"/> 2
101		Filler (Foam) 74A586400-2883	4.10 X 10.15 X 10.65	<input type="checkbox"/> 1 <input type="checkbox"/> 2
102		Filler (Foam) 74A586400-2783	0.45 X 1.75 X 13.95	<input type="checkbox"/> 1 <input type="checkbox"/> 2
103		Filler (Foam) 74A586400-2785	0.70 X 1.70 X 14.45	<input type="checkbox"/> 1 <input type="checkbox"/> 2
104		Filler (Foam) 74A586500-2017		<input type="checkbox"/> 1 <input type="checkbox"/> 2
105		Filler (Foam) 74A586500-2007		<input type="checkbox"/> 1 <input type="checkbox"/> 2
106		Filler (Foam) 74A586500-2009		<input type="checkbox"/> 1 <input type="checkbox"/> 2
107		Filler (Foam) 74A586500-2011		<input type="checkbox"/> 1 <input type="checkbox"/> 2

Figure 1. Material Index (Sheet 15)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
108		Filler (Foam) 74A586500-2005		<input type="checkbox"/> 1 <input type="checkbox"/> 2
109		Filler (Foam) 74A586500-2003		<input type="checkbox"/> 1 <input type="checkbox"/> 2
110		Filler (Foam) 74A586500-2001		<input type="checkbox"/> 1 <input type="checkbox"/> 2
111		Filler (Foam) 74A586500-2019		<input type="checkbox"/> 1 <input type="checkbox"/> 2
<p style="text-align: center;">LEGEND</p> <p><input type="checkbox"/> 1 Make from PPP-C-1752, Type I, 2 pounds per cu. ft., Class III.</p> <p><input type="checkbox"/> 2 Bond foam using EC-847 adhesive - 3M Company - St. Paul, Minn. code ident 04963.</p> <p><input type="checkbox"/> 3 161353 THRU 161705, 161707.</p> <p><input type="checkbox"/> 4 161706, 161708 THRU 161741.</p>				

Figure 1. Material Index (Sheet 16)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

NUMBER 4 FUEL TANK FOAM FILLERS, Y518.000 THROUGH Y557.500

EFFECTIVITY: 161742 AND UP

Reference Material

Fuel System A1-F18AC-460-300
No. 4 Fuel Tank Cavity Foam Filler WP029 01

Alphabetical Index

Subject	Page No.
Damage Evaluation	1
Negligible Damage	1
Repairable Damage	1
Replacement	1

Record of Applicable Technical Directives

None

Support Equipment Required

None

3. **NEGLIGIBLE DAMAGE.** Damage requires depot engineering disposition.

Materials Required

None

4. **REPAIRABLE DAMAGE.** Damage requires depot engineering disposition.1. **DAMAGE EVALUATION.** See figure 1.

2. The figure identifies types of material used. Data shown can be used to analyze damage.

5. **REPLACEMENT.**

6. For replacement of foam fillers (A1-F18AC-460-300, WP029 01).

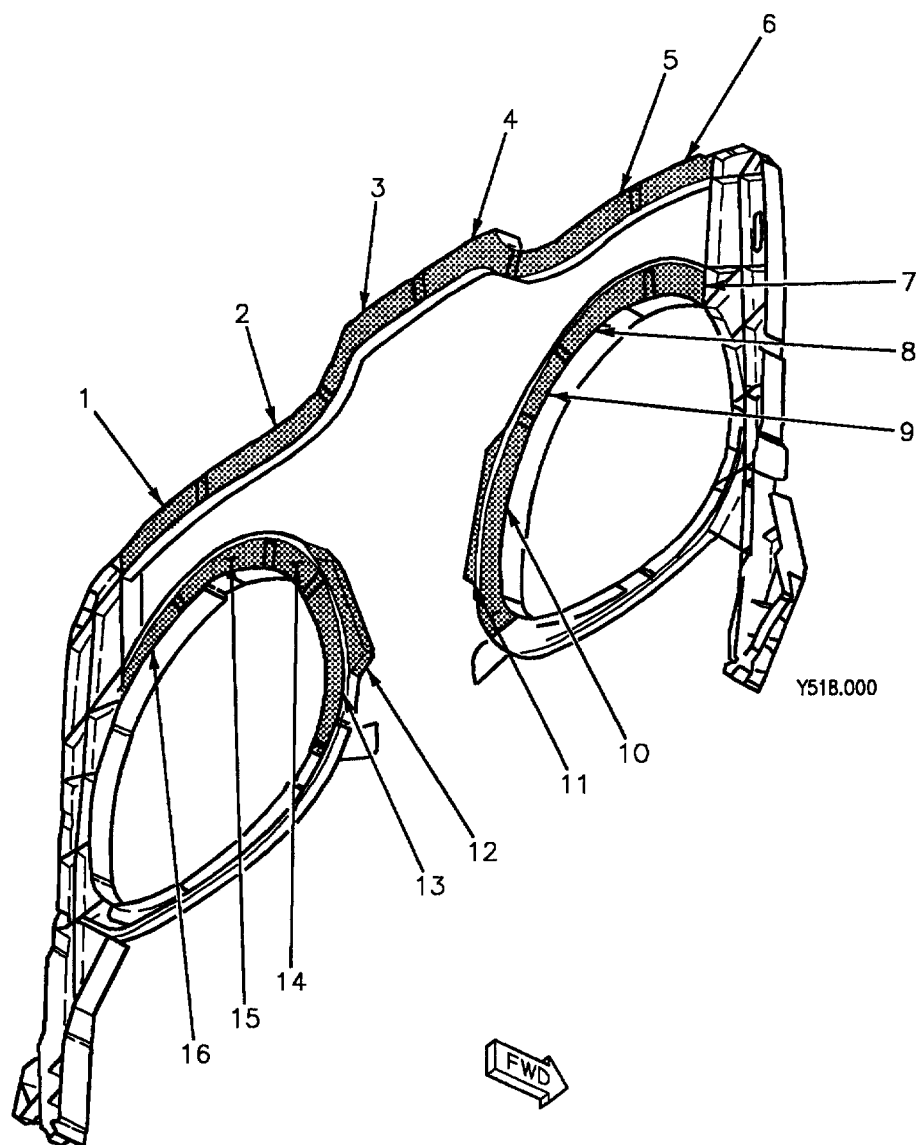


Figure 1. Material Index (Sheet 1)

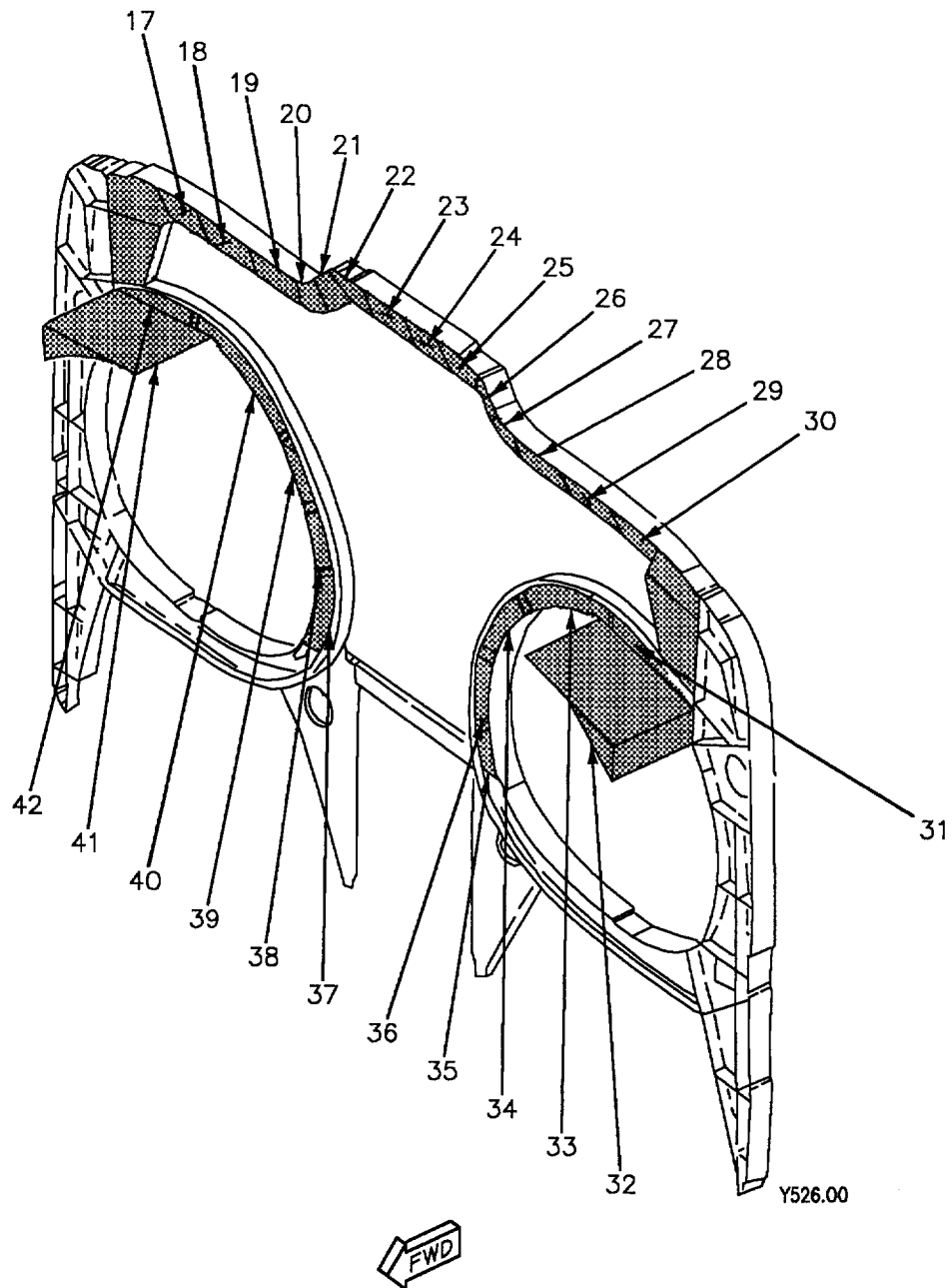


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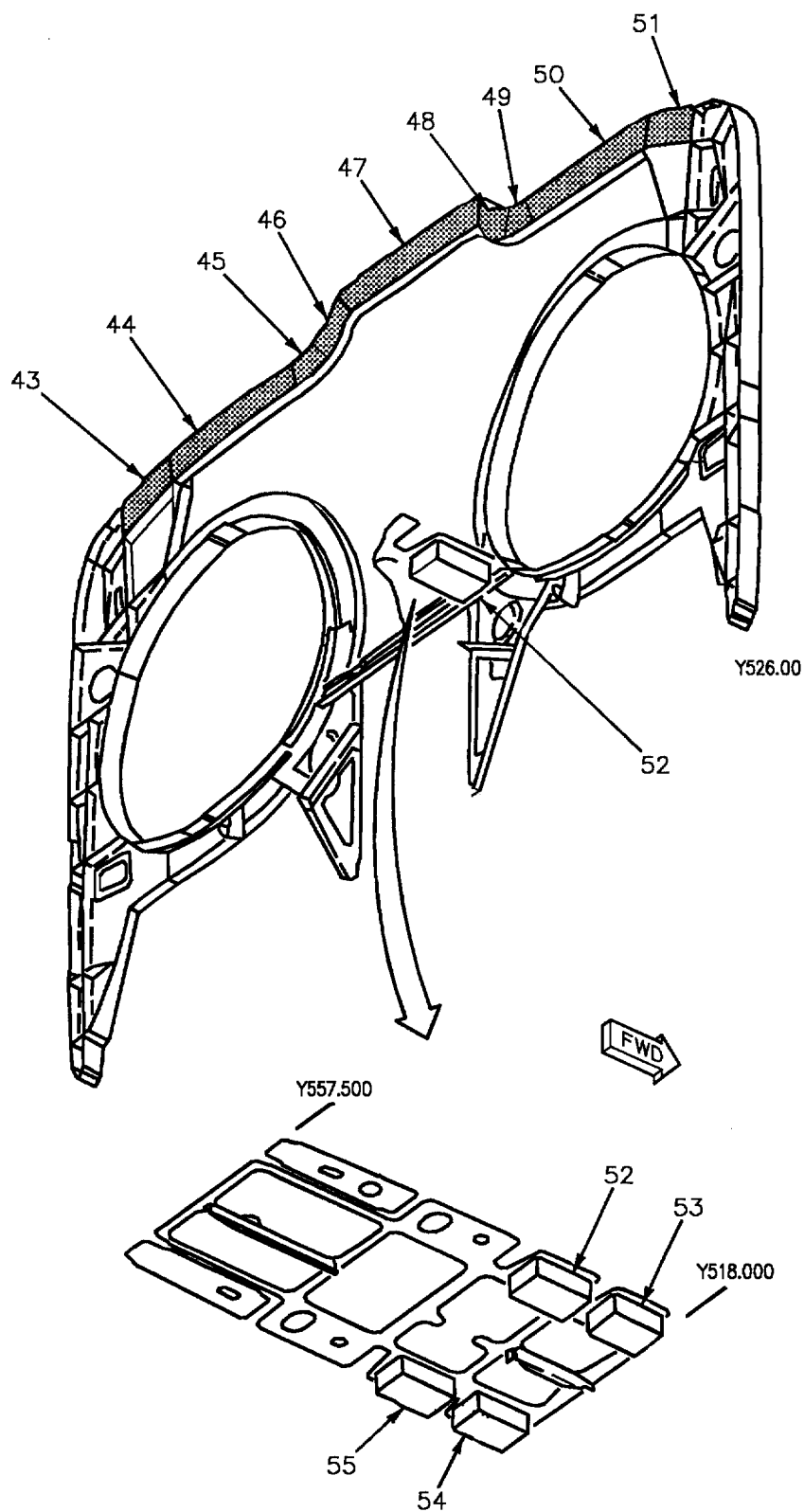


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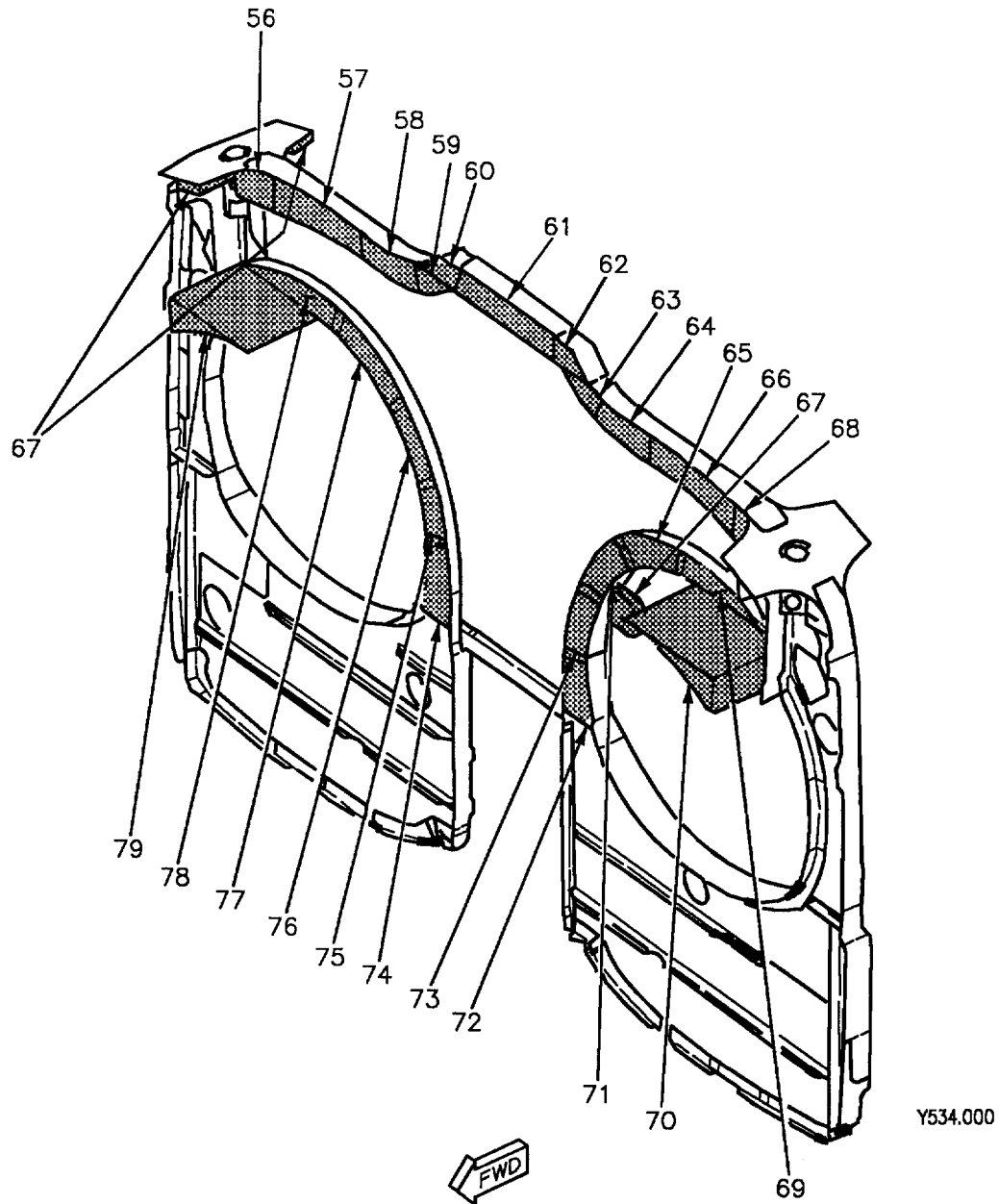


Figure 1. Material Index (Sheet 4)

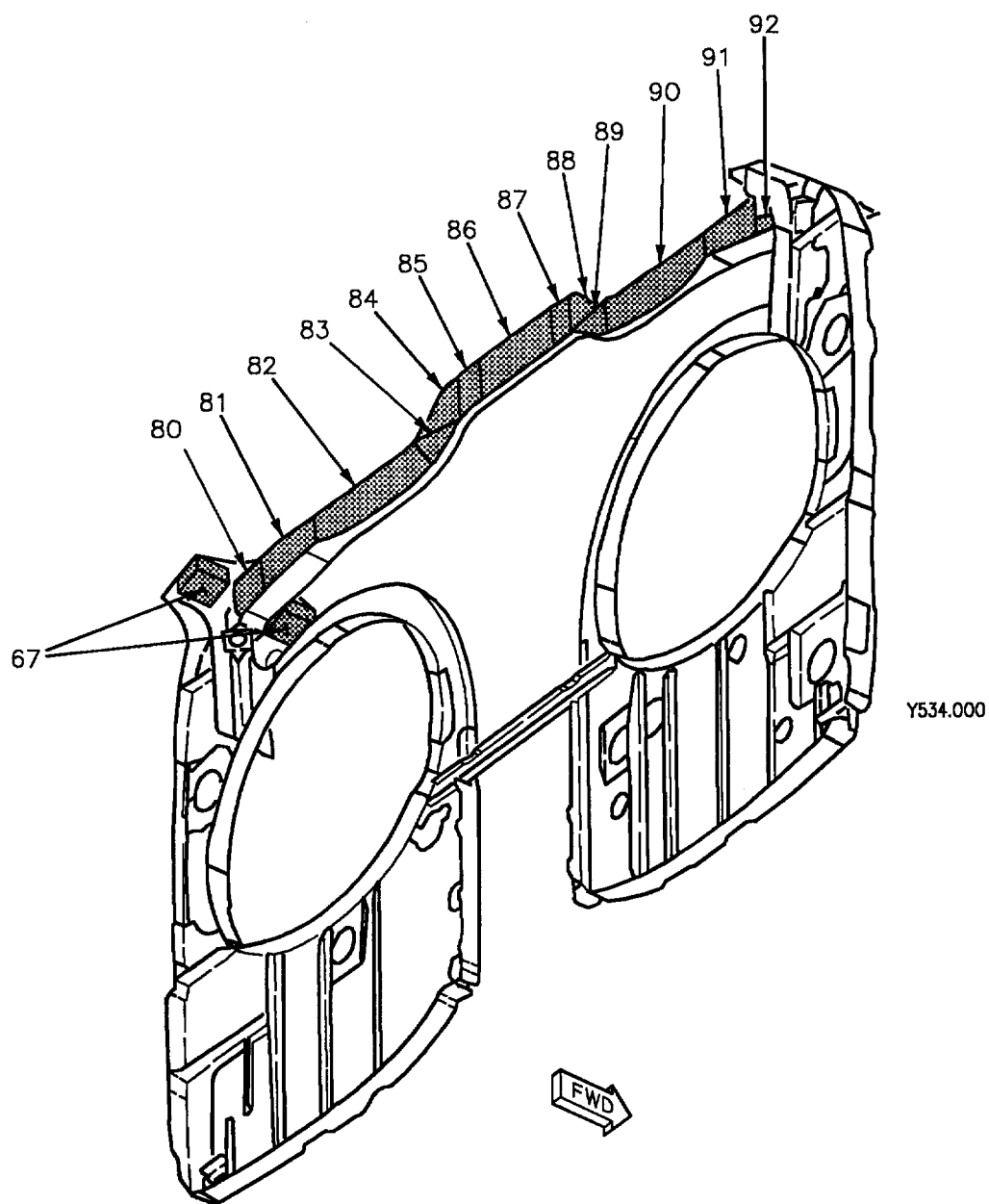


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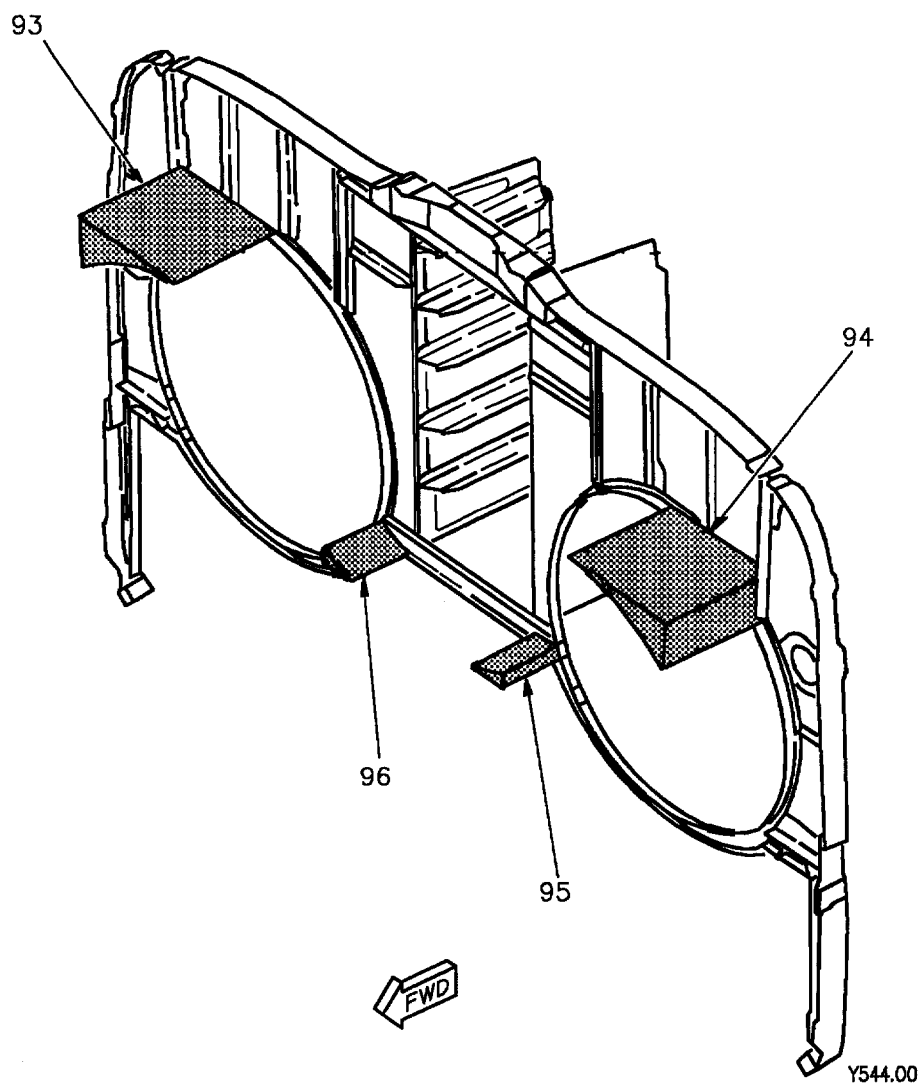


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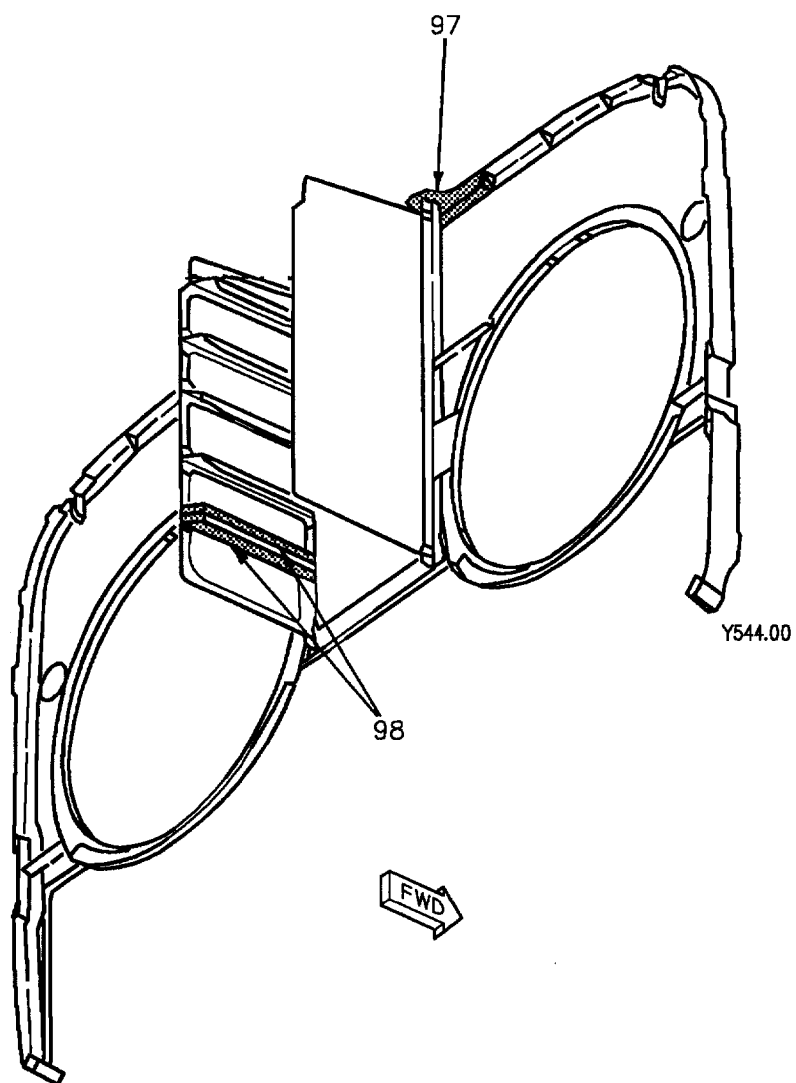


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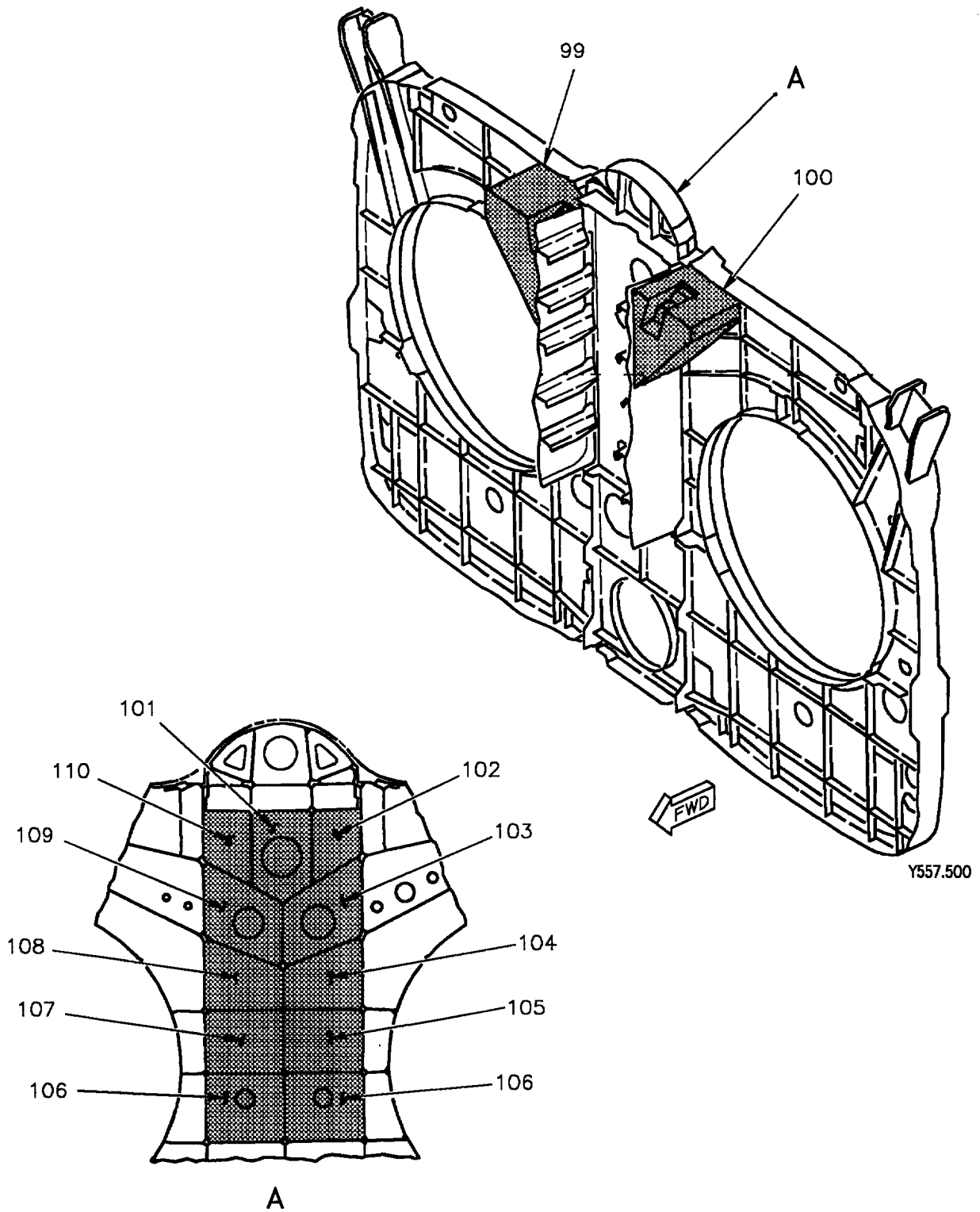


Figure 1. Material Index (Sheet 8)





































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2		Filler (Foam) 74A586400-3007	2.25 X 2.50 X 12.00	 
3		Filler (Foam) 74A586400-3005	2.25 X 5.00 X 14.50	 
4		Filler (Foam) 74A586400-3003	2.25 X 5.00 X 14.50	 
5		Filler (Foam) 74A586400-3008	2.25 X 2.50 X 12.00	 
6		Filler (Foam) 74A586400-3010	2.25 X 3.25 X 8.75	 
7		Filler (Foam) 74A586400-3088	0.55 X 3.75 X 11.25	 
8		Filler (Foam) 74A586400-3086	0.55 X 1.80 X 6.70	 
9		Filler (Foam) 74A586400-3084	0.55 X 1.80 X 5.20	 
10		Filler (Foam) 74A586400-3082	0.55 X 2.80 X 14.00	 
11		Filler (Foam) 74A586400-3410	1.00 X 2.25 X 12.25	 
12		Filler (Foam) 74A586400-3409	1.00 X 2.25 X 12.25	 
13		Filler (Foam) 74A586400-3081	0.55 X 2.80 X 14.00	 
14		Filler (Foam) 74A586400-3083	0.55 X 1.80 X 5.20	 
15		Filler (Foam) 74A586400-3085	0.55 X 1.80 X 6.70	 
16		Filler (Foam) 74A586400-3087	0.55 X 3.75 X 11.25	 
17		Filler (Foam) 74A586400-3130	1.00 X 3.20 X 7.60	 
18		Filler (Foam) 74A586400-3132	0.75 X 2.50 X 6.50	 

Figure 1. Material Index (Sheet 9)





































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21		Filler (Foam) 74A586400-3138	1.00 X 2.60 X 3.20	 
22		Filler (Foam) 74A586400-3140	0.75 X 2.40 X 4.50	 
23		Filler (Foam) 74A586400-3142	0.75 X 2.40 X 4.00	 
24		Filler (Foam) 74A586400-3141	0.75 X 2.40 X 4.00	 
25		Filler (Foam) 74A586400-3139	0.75 X 2.40 X 4.50	 
26		Filler (Foam) 74A586400-3137	1.00 X 2.60 X 3.20	 
27		Filler (Foam) 74A586400-3135	0.75 X 2.75 X 5.25	 
28		Filler (Foam) 74A586400-3133	0.75 X 2.50 X 6.50	 
29		Filler (Foam) 74A586400-3131	0.75 X 2.50 X 6.50	 
30		Filler (Foam) 74A586400-3129	1.00 X 3.20 X 7.60	 
31		Filler (Foam) 74A586400-3119	0.75 X 1.90 X 8.30	 
32		Filler (Foam) 74A586400-3301	4.75 X 6.50 X 10.75	 
33		Filler (Foam) 74A586400-3121	0.75 X 2.10 X 10.00	 
34		Filler (Foam) 74A586400-3123	0.75 X 1.60 X 6.40	 
35		Filler (Foam) 74A586400-3127	0.75 X 2.00 X 5.30	 
36		Filler (Foam) 74A586400-3125	0.75 X 1.50 X 5.50	 

Figure 1. Material Index (Sheet 10)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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38		Filler (Foam) 74A586400-3126	0.75 X 1.50 X 5.50	 
39		Filler (Foam) 74A586400-3124	0.75 X 1.60 X 6.40	 
40		Filler (Foam) 74A586400-3122	0.75 X 2.10 X 10.00	 
41		Filler (Foam) 74A586400-3302	4.75 X 6.50 X 10.75	 
42		Filler (Foam) 74A586400-3120	0.75 X 1.90 X 8.30	 
43		Filler (Foam) 74A586400-3151	1.00 X 3.10 X 7.80	 
44		Filler (Foam) 74A586400-3149	0.75 X 2.50 X 12.90	 
45		Filler (Foam) 74A586400-3147	0.75 X 2.75 X 5.20	 
46		Filler (Foam) 74A586400-3145	1.00 X 2.50 X 3.50	 
47		Filler (Foam) 74A586400-3143	0.75 X 2.50 X 17.25	 
48		Filler (Foam) 74A586400-3146	1.00 X 2.50 X 3.50	 
49		Filler (Foam) 74A586400-3148	0.75 X 2.75 X 5.20	 
50		Filler (Foam) 74A586400-3150	0.75 X 2.50 X 12.90	 
51		Filler (Foam) 74A586400-3152	1.00 X 3.10 X 7.80	 
52		Filler (Foam) 74A585008-2128	-	 
53		Filler (Foam) 74A585008-2126	-	 
54		Filler (Foam) 74A585008-2141	-	 

Figure 1. Material Index (Sheet 11)





































Idx No.	Eft	Nomenclature and Part No.	Description	Material
55		Filler (Foam) 74A585008-2143	-	 
56		Filler (Foam) 74A586400-3164	1.00 X 1.50 X 3.00	 
57		Filler (Foam) 74A586400-3166	1.00 X 3.00 X 14.20	 
58		Filler (Foam) 74A586400-3168	1.00 X 2.50 X 6.90	 
59		Filler (Foam) 74A586400-3170	1.00 X 2.10 X 4.20	 
60		Filler (Foam) 74A586400-3172	1.00 X 2.20 X 4.20	 
61		Filler (Foam) 74A586400-3173	1.00 X 2.40 X 13.20	 
62		Filler (Foam) 74A586400-3171	1.00 X 2.20 X 4.20	 
63		Filler (Foam) 74A586400-3169	1.00 X 2.10 X 4.20	 
64		Filler (Foam) 74A586400-3167	1.00 X 2.50 X 6.90	 
65		Filler (Foam) 74A586400-3155	0.75 X 1.60 X 7.40	 
66		Filler (Foam) 74A586400-3165	1.00 X 3.00 X 14.20	 
67		Filler (Foam) 74A586400-3461	0.75 X 2.00 X 2.75	 
68		Filler (Foam) 74A586400-3163	1.00 X 1.50 X 3.00	 
69		Filler (Foam) 74A586400-3153	0.75 X 3.10 X 11.50	 
70		Filler (Foam) 74A586400-3303	4.50 X 7.25 X 10.75	 
71		Filler (Foam) 74A586400-3157	0.75 X 1.50 X 6.00	 
72		Filler (Foam) 74A586400-3161	0.75 X 3.75 X 7.75	 

Figure 1. Material Index (Sheet 12)





































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75		Filler (Foam) 74A586400-3160	0.75 X 1.60 X 5.20	 
76		Filler (Foam) 74A586400-3158	0.75 X 1.50 X 6.00	 
77		Filler (Foam) 74A586400-3156	0.75 X 1.60 X 7.40	 
78		Filler (Foam) 74A586400-3154	0.75 X 3.10 X 11.50	 
79		Filler (Foam) 74A586400-3304	4.50 X 7.25 X 10.75	 
80		Filler (Foam) 74A586400-3187	1.00 X 1.50 X 3.00	 
81		Filler (Foam) 74A586400-3185	1.00 X 2.90 X 8.10	 
82		Filler (Foam) 74A586400-3183	1.00 X 2.90 X 13.10	 
83		Filler (Foam) 74A586400-3181	1.00 X 2.00 X 4.25	 
84		Filler (Foam) 74A586400-3179	1.00 X 2.50 X 4.10	 
85		Filler (Foam) 74A586400-3177	1.00 X 2.40 X 3.50	 
86		Filler (Foam) 74A586400-3175	1.00 X 2.40 X 6.25	 
87		Filler (Foam) 74A586400-3178	1.00 X 2.40 X 3.50	 
88		Filler (Foam) 74A586400-3180	1.00 X 2.50 X 4.10	 
89		Filler (Foam) 74A586400-3182	1.00 X 2.00 X 4.20	 
90		Filler (Foam) 74A586400-3184	1.00 X 2.90 X 13.10	 

Figure 1. Material Index (Sheet 13)





































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92		Filler (Foam) 74A586400-3188	1.00 X 1.50 X 3.00	 
93		Filler (Foam) 74A586400-3306	4.25 X 9.25 X 10.75	 
94		Filler (Foam) 74A586400-3305	4.25 X 9.25 X 10.75	 
95		Filler (Foam) 74A586400-3459	2.50 X 5.00 X 9.75	 
96		Filler (Foam) 74A586400-3460	2.50 X 5.00 X 9.75	 
97		Filler (Foam) 74A586400-3441	0.62 X 3.25 X 24.00	 
98		Filler (Foam) 74A586400-3293	1.00 X 1.00 X 13.75	 
99		Filler (Foam) 74A586400-3452	3.12 X 4.50 X 4.50	 
100		Filler (Foam) 74A586400-3451	3.12 X 4.50 X 4.50	 
101		Filler (Foam) 74A586500-2029	0.94 X 5.00 X 7.50	 
102		Filler (Foam) 74A586500-2027	0.94 X 3.50 X 5.75	 
103		Filler (Foam) 74A586500-2025	0.94 X 6.50 X 8.50	 
104		Filler (Foam) 74A586500-2039	0.94 X 5.75 X 6.50	 
105		Filler (Foam) 74A586500-2037	0.94 X 5.00 X 6.50	 
106		Filler (Foam) 74A586500-2035	0.94 X 5.50 X 6.50	 
107		Filler (Foam) 74A586500-2043	0.94 X 5.00 X 6.50	 
108		Filler (Foam) 74A586500-2041	0.94 X 5.75 X 6.50	 

Figure 1. Material Index (Sheet 14)








Idx No.	Eft	Nomenclature and Part No.	Description	Material
109		Filler (Foam) 74A586500-2033	0.94 X 6.50 X 8.50	 
110		Filler (Foam) 74A586500-2031	0.94 X 4.00 X 5.75	 
<p style="text-align: center;">LEGEND</p> <p> Bond foam using EC-847 adhesive 3M Company, St. Paul, Minn 04963.</p> <p> Make from PPP-C-1752, type 1, 2 pounds per cu. ft., Class III.</p> <p> Make from basil laminated sandwich panel, 1.7 +0.001 -0.000 inches thick. Nylon ballistic cloth, MIL-C-12369, Class 1, natural, untreated; and exterior reticulated foam MMS-554.</p>				

Figure 1. Material Index (Sheet 15)

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE GRAPHITE EPOXY SKIN AND ALUMINUM HONEYCOMB CORE COVERS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Aft Center Fuselage Finish System and Markings	WP033 00
Removal and Cleanup of Silver Filled Epoxy Adhesive From Structure at Doors 26, 31,40, 43, and 49	WP005 02
Removal and Cleanup of Corrosion from Structure at Doors 10, 13, and 14	WP005 03
Line Maintenance Manual Access Doors	A1-F18AC-LMM-010
Nondestructive Inspection	A1-F18AC-SRM-300
Pulse Echo, Longitudinal Wave Contact, with Delay Line, for Composite Laminate Material Bonded to Honeycomb Core	WP008 04
Forward and Center Fuselage; Upper Bonded Honeycomb Doors, Skin to Core Unbonds and Edge Delaminations	WP077 00
Structure Illustrated Parts Breakdown - Center Fuselage	A1-F18AC-SRM-430
Cover, Access - Fus Ctr Sect, Upr, Y383,Y557.5, Instl of	FIG 007 00
Structure Repair, General Information	A1-F18AC-SRM-200
Gang Channel Identification and Repair	WP004 05
Structure Repair, Typical Repairs	A1-F18AC-SRM-250
Water Removal	WP005 00
Graphite Epoxy Skin, Class III Damage Repair	WP010 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class I Damage Repair	WP012 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class III Damage Repair	WP014 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IV Damage Repair	WP015 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class V Damage Repair	WP016 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VI Damage Repair	WP017 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VII Damage Repair	WP018 00

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Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFB 105	28 Aug 86	Inspection and Repair of the EMI Protection System on Sta Y-128.5, Gun Bay Formers And Intercostal, Avionics Bay Longerons And Bulkheads, Dorsal Longerons And Bulkhead Arches at Sta Y-326 Thru Y-557, Doors 18, 26, 31, 40, 43, 49 And Vertical Stabilizer Doors 86 And 88.	15 Nov 86	Navy Issued

1. **DAMAGE EVALUATION.** See figure 1.

2. Damage is classified as negligible and repairable. Locating and determining size of damage by

visual method is organizational maintenance. Locating and determining size of damage by NDI is intermediate maintenance. Damage not listed or exceeding below limits requires depot engineering disposition.

3. NEGLIGIBLE DAMAGE. See figure 2. Negligible damage may be allowed to exist as is. Type and limits are below:

a. Delaminations between skin plies (figure 2, section A). Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations do not extend to edge of skin.

(2) Diameter is 1/2-inch or less.

(3) Distance between delaminations is at least four diameters of largest delamination. Measure distance between delaminations edge to edge.

(4) No more than three delaminations are in 12 inch diameter circle.

b. Unbonds between skin and honeycomb core (figure 2, section B). Determine size and location of unbonds (A1-F18AC-SRM-300, WP077 00).

(1) Unbonds do not extend to edge of skin.

(2) Diameter is 3/4-inch or less.

(3) Distance between unbonds is at least 4 inches. Measure distance between unbonds edge to edge.

(4) No more than three unbonds are in 12 inch diameter circle.

c. Dents.

(1) Diameter less than 3 inches.

(2) Depth is no greater than 0.015 inches.

4. REPAIRABLE DAMAGE. See figure 3. Repairable damage is damage that can be permanently repaired with no adverse effect on structural integrity, flight characteristics, or safety of aircraft. Damage exceeding below limits requires depot engineering disposition.

5. Skin Surface Damage And Dents Without Honeycomb Core Damage, Class I Damage. See figure 3, section A. This class of damage

does not require immediate repair but shall be repaired soon as practical. Damage shall be monitored to make sure limits are not exceeded. Class I damage is skin damage which does not exceed limits below:

a. Cuts, scratches, pits, erosion, or abrasions.

(1) Depth is no greater than 0.005 inch.

(2) No longer than 5 inches.

b. Dents.

(1) Depth is no greater than 0.05 inch.

(2) Skin delaminations and/or skin to core unbonds do not exceed negligible limits.

(3) Graphite fiber damage is no greater than 0.005 inch deep.

(4) Diameter is no greater than 3 inches.

(5) Distance between dents is at least two diameters of largest dent. Measure distance between dents edge to edge.

(6) No crushed core allowed.

6. Skin Delaminations, Unbonds, or Skin to Core Unbonds not Open to Edge, Class III Damage. See figure 3, section B. This class of damage is individual or multiple unbonds that are not open to edge of cover. Class III damage shall not exceed limits below:

a. Unbonds between composite skins in land area may be up to 1 inch wide and 4 inches long. Distance between unbonds shall be at least four diameters of largest unbond.

b. Unbonds between composite skin and honeycomb core may be up to 3 inches in diameter. Distance between unbonds shall be at least four diameters of largest unbond. Determine size and location of unbonds (A1-F18AC-SRM-300, WP077 00).

c. Damage to fastener holes which do not exceed limits of fastener hole clean up, Damaged

Fastener Holes Repair (A1-F18AC-SRM-250, WP010 00 or WP016 00).

7. Skin Delaminations or Unbonds Open To Edge, Class IV Damage. See figure 3, section C. Determine size and location of delaminations (A1-F18AC-SRM-300, WP077 00). This class of damage is delaminations between skin plies open to edge of cover but do not extend into skin to honeycomb core bond area. Delaminations may be up to 1 inch wide and 4 inches long. Distance between delaminations shall be at least four diameters of largest delamination.

8. Fiber Damage Around Fastener Holes And Surface Rips, Class V Damage. See figure 3, section D and E. This class of damage is damaged fibers around fastener holes or surface ply rips. Class V damage is skin damage which does not exceed limits below:

a. Loose or broken fibers, missing fibers, or skin abrasions around fastener holes and/or countersinks may be up to 0.015 inch deep, 1/4-inch wide, and 1/2-inch long.

b. Surface ply rips at edge of graphite epoxy laminate may be up to 0.015 inch deep, 1/4-inch wide, and 1/2-inch long.

c. Damage to fastener holes which do not exceed limits of fastener hole clean up, Damaged Fastener Holes Repair (A1-F18AC-SRM-250, WP010 00 or WP016 00).

9. Skin Damage, Without Penetration, Class VI Damage. See figure 3, section F. This class of damage exceeds class I damage limits but does not penetrate skin. Class VI damage also includes delaminations over honeycomb core that exceed negligible damage limits. Class VI damage shall not exceed limits below:

a. Depth is less than full skin penetration.

b. Diameter is 8.50 inch or less.

c. Distance between damage is at least four diameters of largest damage.

d. Damage shall be repairable using patch selected in paragraph 14.

e. Delaminations over honeycomb core between composite skin plies may be up to 3 inches in diameter. Distance between delaminations shall be at least four diameters of largest delamination.

10. Skin Damage with Penetration and Dents with Honeycomb Core Damage, Class VII Damage. See figure 3, sections G, H and J. This class of damage is full penetration of one or both skins, or dents, with honeycomb core damage. Class VII damage shall not exceed limits below:

a. Damage may be full penetration of one or both skins.

b. Damage is not allowed in areas where inner and outer skins are bonded together or where skin is bonded to graphite inserts.

c. Diameter 8.50 inches or less.

d. Distance between damages is at least four diameters of largest damage.

e. Damage shall be repairable using patch selected in paragraph 14.

f. Dents.

(1) Diameter greater than 3 inches.

(2) Depth greater than 0.05 inches.

(3) Crushed core is allowed.

11. Water In Honeycomb Core, Class VIII Damage. This class of damage is water trapped in honeycomb core.

12. REPAIRS.

13. Class I, III, IV, V, VI, and VIII are organizational maintenance. Class VII less than 1.5 inches in diameter is organizational maintenance; over 1.5 inches in diameter is intermediate maintenance. Class I, III, IV, V, VI, VII, and VIII damages may be repaired per procedures below:

a. Repair class I damage (A1-F18AC-SRM-250, WP012 00).

b. Repair class III damage skin delaminations, unbonds, or skin to core unbonds not open to edge (A1-F18AC-SRM-250, WP014 00). Repair Class III damage to fastener holes (A1-F18AC-SRM-250, WP010 00). Drill and countersink fastener holes to original size, see figure 7.

c. Repair class IV damage (A1-F18AC-SRM-250, WP015 00).

d. Repair class V damage fiber damage around fastener holes, surface rips, and damaged fastener holes (A1-F18AC-SRM-250, WP016 00). Repair Class V damage to fastener holes (A1-F18AC-SRM-250, WP016 00). Drill and countersink fastener holes to original size, see figures 4, 5, and 6.

e. Select patch for Class VI damage per paragraph 14. Repair Class VI damage (A1-F18AC-SRM-250, WP017 00).

f. Select patch for Class VII damage per paragraph 14. Repair Class VII damage (A1-F18AC-SRM-250, WP018 00).

g. Repair class VIII damage (A1-F18AC-SRM-250, WP005 00).

14. **PATCH SELECTION.** Select applicable patch number using table 1 and limits below:

a. When repairing outer skin, required patch, when centered over repair area, shall not overlap any fastener or door periphery.

b. When repairing inner skin, required patch, when centered over repair area shall not overlap buildup around door periphery.

c. Patches not meeting requirements of step a or b shall be submitted to depot engineering for disposition.

15. **REPAIRS TO EDGES OF DORSAL COVERS, DOORS 40, 43, AND 49.** See figure 7.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source	-

Materials Required

Nomenclature	Specification or Part Number
--------------	------------------------------

NOTE

Alternate item specification or part numbers are shown indented.

Abrasive Paper, Silicon Carbide	A-A-1047 GRIT 150 and 320
Adhesive	EA934
Adhesive	EA956
Adhesive	Eccobond 64C
Adhesive	Silastic 732 RTV
Aluminum Tape, 2 Inches Wide, 3M Company	425 (428)
Cheesecloth	CCC-C-440 Type 1
Connector	MS3101R 16-10P
Copper Tape, 1 Inch Wide, Conductive Through Adhesive	1245 (1181)
Mens Gloves, Cotton Work Gloves	MIL-G-3866 Type 1 Small or Medium
Methyl Ethyl Ketone	TT-M-261
Pressure Sensitive Tape, Masking Tape	A-A-883 Type 1
Spatula	-
Toothbrush	H-T-560
	Type 1, Style B
Untreated Kraft Paper	A-A-203

16. **REPAIR TO OUTER EDGE TITANIUM RUB STRIPS OF DORSAL COVERS, DOORS 40, 43, 49 AND AFT EDGE OF DOOR 49.** Repairs to outer edge and aft edge of door 49 titanium rub strips of dorsal covers are done using one of four procedures below.

17. **Repair to Unbond Less Than 1 Inch to Titanium Rub Strips.**



Methyl Ethyl Ketone

1

a. Clean repair area(s) with methyl ethyl ketone moistened cheesecloth to make sure repair area(s) is free of contamination or foreign material.

b. Before methyl ethyl ketone dries wipe repair area(s) with clean dry cheesecloth.



Adhesive



2



Wear clean cotton work gloves when working on graphite epoxy materials to prevent contamination.

c. Rebond titanium rub strip using EA934 adhesive as below:

- (1) Mix EA934 adhesive.

NOTE

Mix only amount of materials to be used in 40 minutes.

(a) Combine by weight, 100 parts of part A with 33 parts of part B.

(b) Mix the two compounds thoroughly; adhesive will be uniform in color when mixed.

(c) Allow EA934 adhesive to set 5 minutes for air bubble removal before application.

(2) Apply thin film of mixture to both surfaces to be repaired.

(3) Assemble immediately.

(4) Apply pressure to get complete contact.

(5) Remove squeeze out with cheesecloth moistened with methyl ethyl ketone.

(6) EA934 adhesive is cured by one of two methods.

(a) Air cure method: Allow to cure at room temperature for 5 days.



If using heat cure method, do not exceed 200° F or damage to assembly may occur.

(b) Heat cure method: Use a 250 watt infrared heat source, not exceeding 200° F. Connect infrared heat source to 74D110165 repair set with MS3101R16-10P connector.

18. Repair to Unbond(s) More Than 1 Inch to Titanium Rub Strips.

- a. Remove unbonded titanium rub strip(s).



Methyl Ethyl Ketone

1

b. Clean surfaces to be repaired with cheesecloth moistened with methyl ethyl ketone to make sure repair surfaces are free of contamination or foreign material.

c. Any area(s) where conductive adhesive remains after methyl ethyl ketone cleaning shall be lightly sanded with 150 grit abrasive paper until conductive adhesive is removed.

d. Vacuum clean loose conductive adhesive particles to avoid contaminating other surfaces.



To avoid contamination of solvent, always pour methyl ethyl ketone onto clean cheesecloth. Never dip cheesecloth into solvent.

e. Clean repair surface with cheesecloth moistened with methyl ethyl ketone to make sure repair surface is free of contamination or foreign material. Before methyl ethyl ketone dries wipe repair surface with clean dry cheesecloth. Continue cleaning and wiping until no residue appears on clean dry cheesecloth.



Adhesive

3



Wear clean cotton work gloves when working with graphite epoxy materials to prevent contamination.

f. Mix Eccobond 64C adhesive by mixing thoroughly 5 parts of part B to 100 parts of part A by weight.

g. Bond titanium rub strip as below:

(1) Apply thin film of Eccobond 64C adhesive to both surfaces to be bonded.

(2) Mate bonding surfaces using only contact pressure.

(3) Remove squeeze out with clean cheesecloth moistened with methyl ethyl ketone.

h. Cure Eccobond 64C adhesive as below:

(1) Room temperature for 24 hours.



If using heat cure, do not exceed 200° F or damage to surrounding area may occur.

(2) Heat cure: Use a 250 watt infrared heat source for 1 hour at 160° F plus or minus 10° F. Connect infrared heat source to 74D110165 repair set with MS3101R16-10R connector.

19. Repair to Edge With Titanium Rub Strip Using Aluminum Tape.

a. Remove titanium rub strip.



Methyl Ethyl Ketone

1

b. Clean repair area with a methyl ethyl ketone moistened cloth to make sure repair area is free of contamination or foreign material.

c. Lightly sand repair area with 150 grit abrasive paper.

d. Vacuum clean loose conductive adhesive particles to avoid contaminating other surfaces.

e. Clean repair area with cheesecloth moistened with methyl ethyl ketone to make sure repair area is free of contamination or foreign material.

f. Apply 2 inch wide strip of aluminum tape. If a continuous piece of aluminum tape can not be applied along one edge, overlap aluminum tape 2 inches.

20. Repair to Edge With Titanium Rub Strip by Applying Tin-Zinc Arc Spray.

a. Remove titanium rub strip.

b. Lightly sand repair surface with 150 grit or finer abrasive paper to remove conductive adhesive.

c. Vacuum clean loose conductive adhesive particles to avoid contaminating other surfaces.



Methyl Ethyl Ketone

1

d. Clean repair area with cheesecloth moistened with methyl ethyl ketone to make sure repair area is free of contamination or foreign material.

e. Apply 2 inches wide strip of tin-zinc arc spray (A1-F18AC-SRM-500, WP005 03).

21. REPAIR TO FORWARD EDGE TITANIUM RUB STRIP OF DOORS 40, 43, AND 49. Repairs to forward edge titanium rub strip of doors 40, 43, and 49 are done using one of four procedures below.

22. Repair to Unbond Less Than 1 Inch to Titanium Rub Strips.



Methyl Ethyl Ketone

1

a. Clean repair area(s) with cheesecloth moistened with methyl ethyl ketone to make sure repair area(s) is free of contamination or foreign material.

b. Before methyl ethyl ketone dries wipe repair area(s) with clean dry cheesecloth.



Adhesive



2



Wear clean cotton work gloves when working on graphite epoxy materials to prevent contamination.

c. Rebond titanium rub strip using EA934 adhesive as below:

- (1) Mix EA934 adhesive.

NOTE

Mix only amount of materials to be used in 40 minutes.

(a) Combine by weight, 100 parts of part A with 33 parts of part B.

(b) Mix the two compounds thoroughly; adhesive will be uniform in color when mixed.

(c) Allow EA934 adhesive to set 5 minutes for air bubble removal before application.

(2) Apply thin film of mixture to both surfaces to be bonded.

(3) Assemble immediately.

(4) Apply pressure to get complete contact.

(5) Remove squeeze out with cheesecloth moistened with methyl ethyl ketone.

(6) EA934 adhesive is cured by one of two methods.

(a) Air cure method: Allow to cure at room temperature for 5 days.



If using heat cure method, do not exceed 200° F or damage to assembly may occur.

(b) Heat cure method: Use a 250 watt infrared heat source, not exceeding 200°F. Connect infrared heat source to 74D110165 repair set with MS3101R16-10P connector.

23. Repair to Unbond(s) More Than 1 Inch to Titanium Rub Strips.

- a. Remove unbonded titanium rub strip(s).



Methyl Ethyl Ketone

1

b. Clean surfaces to be repaired with cheesecloth moistened with methyl ethyl ketone to make sure repair surfaces are free of contamination or foreign material.

c. Any area(s) where conductive adhesive remains after methyl ethyl ketone cleaning shall be lightly sanded with 150 grit abrasive paper until conductive adhesive is removed.

d. Vacuum clean loose conductive adhesive particles to avoid contaminating other surfaces.



To avoid contamination of solvent, always pour methyl ethyl ketone onto clean cheesecloth. Never dip cheesecloth into solvent.

e. Clean repair surface with cheesecloth moistened with methyl ethyl ketone to make sure repair surface is free of contamination or foreign material. Before methyl ethyl ketone dries wipe bonding surface with clean dry cheesecloth. Continue cleaning and wiping until no residue appears on clean dry cheesecloth.



Adhesive

3



Wear clean cotton work gloves when working with graphite epoxy materials to prevent contamination.

f. Mix Eccobond 64C adhesive by mixing thoroughly 5 parts of part B to 100 parts of part A by weight.

g. Bond titanium rub strip as below:

(1) Apply thin film of adhesive to both surfaces of repair area.

(2) Mate bonding surfaces using only contact pressure.

24. Repair to Forward Edge Titanium Rub Strip of Dorsal Covers, Doors 40, 43, and 49 Using Tin-Zinc Arc Spray.

a. Remove titanium rub strip.

b. Mask upper surface of lip, forward edge, doors 40 and 43 and forward edge door 49, near area to be tin-zinc arc sprayed.



Excess sanding will damage composite surface or cause poor tin-zinc arc spray adhesion.

c. Lightly sand upper surface of lip on forward edge, doors 40 and 43 and forward edge door 49, with 150 grit abrasive paper to remove conductive adhesive and paint.

d. Vacuum clean all loose conductive adhesive particles to avoid contaminating other surfaces.



Methyl Ethyl Ketone

1

e. With cheesecloth moistened with methyl ethyl ketone, clean surface of lip to be tin-zinc arc sprayed to

make sure surface is free of contamination or foreign material. Continue cleaning repair surface until no residue appears on clean cheesecloth.



Adhesive

4



Wear clean cotton work gloves when working with graphite epoxy material to prevent contamination.

NOTE

Mix only amount of materials to be used in 40 minutes.

f. Mix EA956 adhesive:

(1) Combine by weight, 100 parts of part A with 58 parts of part B.

(2) Mix the two compounds thoroughly; adhesive will be uniform in color when mixed.

(3) Allow adhesive to set 5 minutes for air bubble removal before application.

g. Apply very thin coat of EA956 adhesive to cleaned surface of lip.

h. Apply tin-zinc arc spray while EA956 adhesive is still tacky (A1-F18AC-SRM-500, WP005 03).

25. Temporary/Alternate Repair to Forward Edge of Dorsal Covers, Doors 40, 43, and 49. Temporary/alternate repairs to forward edge of dorsal covers are done using steps below:

a. Remove titanium rub strip.

b. Scuff sand conductive adhesive using 150 grit abrasive paper.

c. Vacuum clean loose conductive adhesive particles to avoid contaminating other surfaces.



Methyl Ethyl Ketone

1

d. Clean repair area with cheesecloth moistened with methyl ethyl ketone to make sure repair area is free of contamination or foreign material.

e. Apply 1 inch wide copper tape to repair surface.

26. REPAIR TO AFT EDGE BULB SEALS, EMI AND WEATHER SEALS, OF DORSAL COVERS, DOORS 40 AND 43. Repairs to aft edge bulb seals (EMI and weather seals) are done as below:

a. Remove damaged seal.

b. Using 320 grit abrasive paper scuff sand repair surface to remove all gloss.

c. If EMI seal is to be rebonded, vacuum clean loose adhesive particles to avoid contaminating other surfaces with conductive adhesive.



Methyl Ethyl Ketone

1



To avoid contamination of methyl ethyl ketone, always pour methyl ethyl ketone onto clean cheesecloth. Never dip cheesecloth into solvent.

d. Clean repair surface with cheesecloth moistened with methyl ethyl ketone to make sure repair surface is free of contamination or foreign material. Before methyl ethyl ketone dries wipe bonding surface with clean dry cheesecloth. Continue cleaning and wiping with clean dry cheesecloth until no residue appears on cheesecloth.



Adhesive

3



Wear clean cotton work gloves when working with graphite epoxy materials to prevent contamination.

e. Mix Eccobond 64C adhesive by mixing thoroughly 5 parts of B to 100 parts of A by weight.

f. Bond EMI seal as below:

(1) Apply thin film of Eccobond 64C adhesive to both surfaces using brush or spatula.

(2) Mate bonding surfaces using only contact pressure.

(3) Remove squeeze out with clean cheesecloth moistened with methyl ethyl ketone.

g. Cure Eccobond 64C adhesive as below:

(1) Room temperature for 24 hours.



If using heat cure method, do not exceed 170°F or damage to seal may occur.

(2) Heat cure method: Use 250 watt infrared heat source for 1 hour at 160° F plus or minus 10° F. Connect infrared heat source to 74D110165 repair set with MS3101R16-10P connector.

h. Bond weather seal as below:



Adhesive

5

(1) Apply small amount of silastic 732 RTV adhesive to one bonding surface using brush or spatula. Adhesive thickness should be uniform 10 to 30 mils maximum.

(2) Join parts immediately, within 10 minutes of application.



Adhesive



5

i. Silastic 732 RTV adhesive will cure to handle in 24 hours and full cure in 2 to 3 days.














27. Fastener Hole Repair, Doors 40, 43, and 49. See figure 7.

a. All periphery fasteners are tension head fasteners.

b. To repair fastener holes, refer to Damaged Fastener Holes Repair, Repair Method Two (A1-F18AC-SRM-250, WP016 00).

c. Hole diameter for repaired fastener hole(s) is 0.250 +0.0060 -0.0000.

Table 1. Patch Selection for Graphite Epoxy and Titanium Patches

Damage Size (Dia.)	Graphite Epoxy Patch		Titanium Patch	
	 No.	Dia.	 No.	Dia.
0.0 to 0.25	-1001	2.75	-	-
0.25 to 1.50	 -1007	4.00	-2005	4.00
1.50 to 2.75	 -1009	5.25	-2009	5.25
2.75 to 4.00	 -1011	6.50	-2013	6.50
4.00 to 5.25	 -1013	7.75	-2017	7.75
5.25 to 6.00	 -1015	9.00	-2021	9.00
6.00 to 6.83	 -1017	10.25	-2025	10.25
6.83 to 7.66	 -1019	11.50	-2029	11.50
7.66 to 8.50	 -1021	12.75	-2033	12.75
NOTES 1. Bond patch with either EA9321 or FM300 adhesive.  Dash number of 74K000002 kit.  Dash number of 74K000003 kit.  Do not use this patch on door 43, door 49, or within 10 inches of the inboard or outboard edges of door 40.				

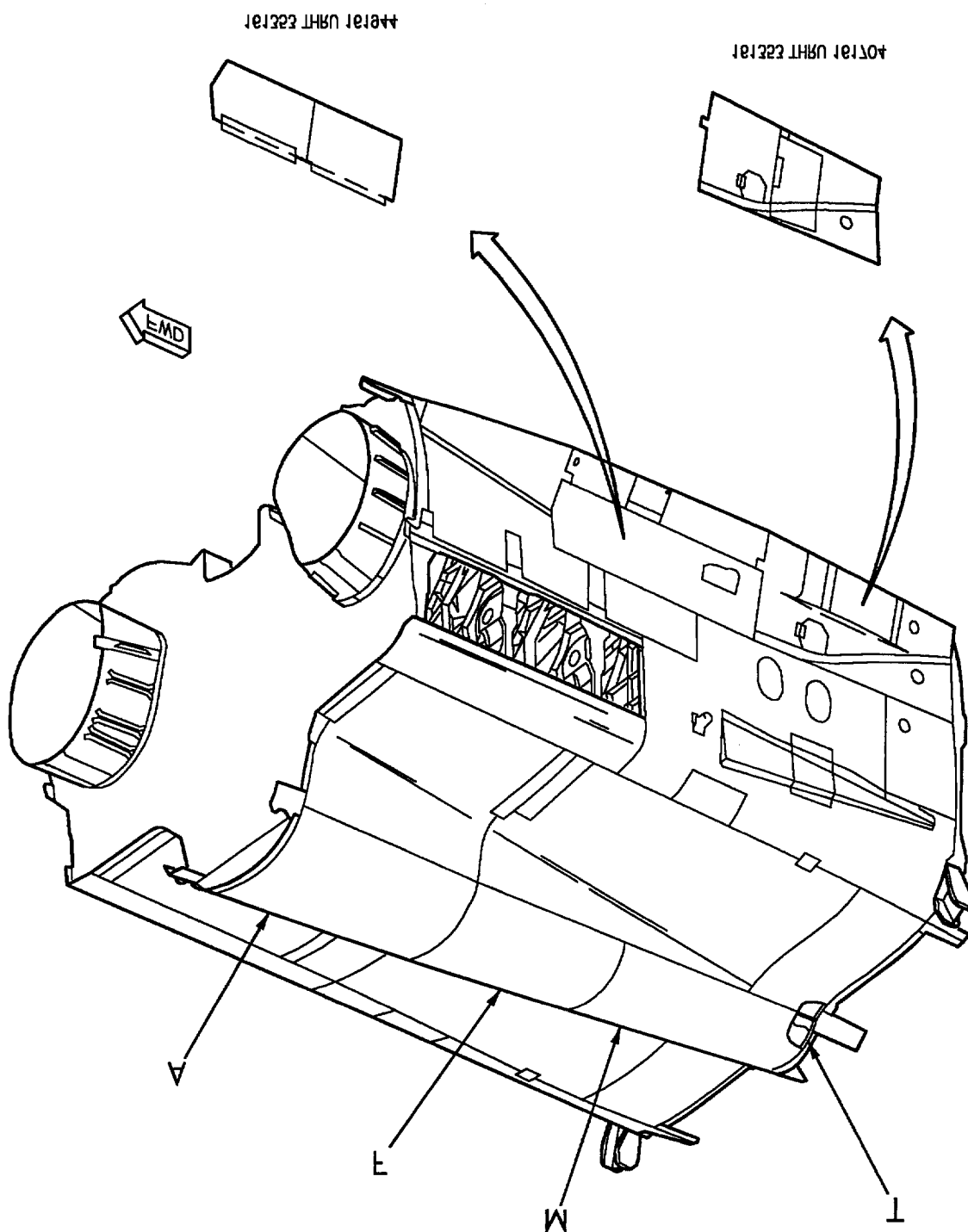
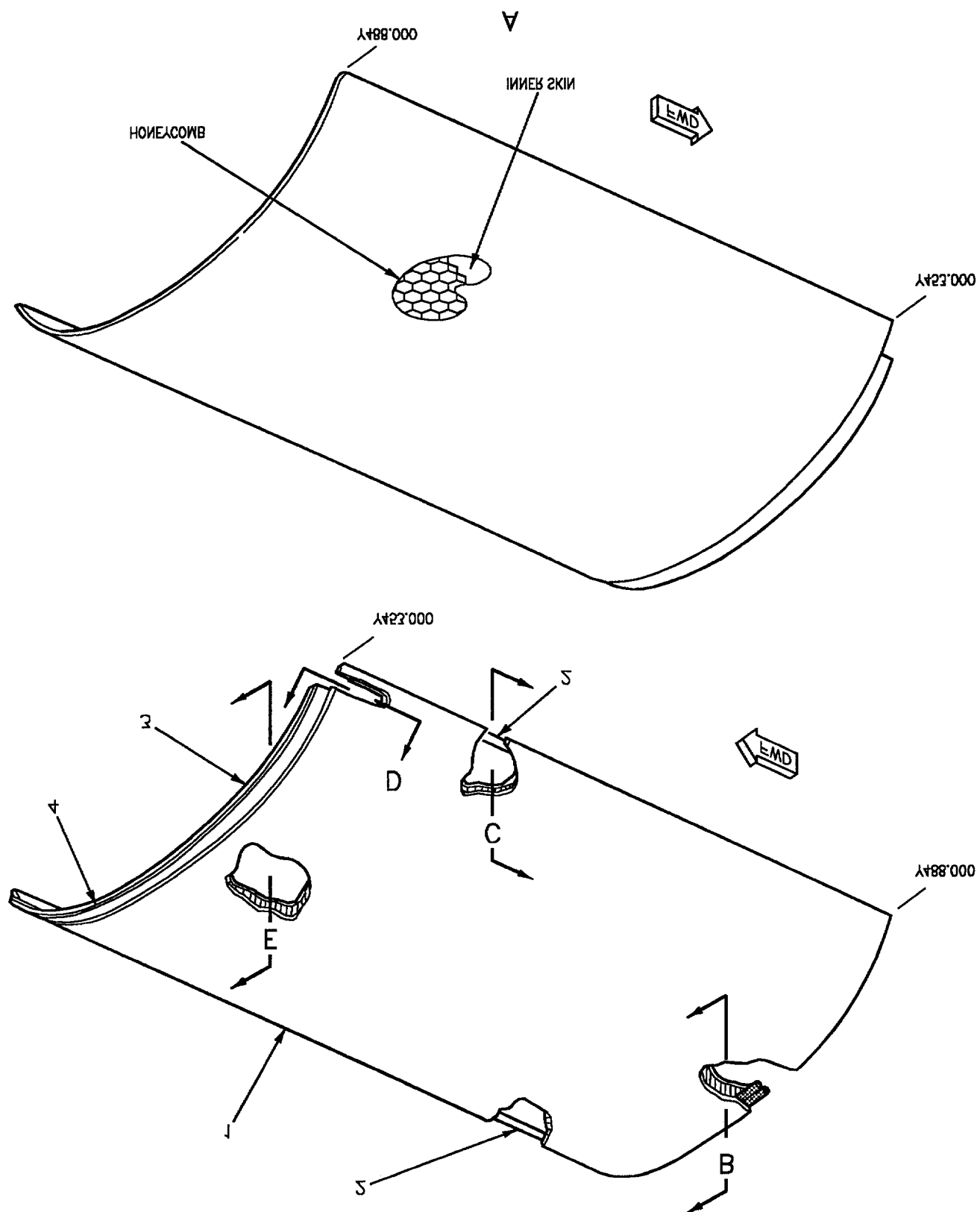


Figure 1. Material Index (Sheet 1)



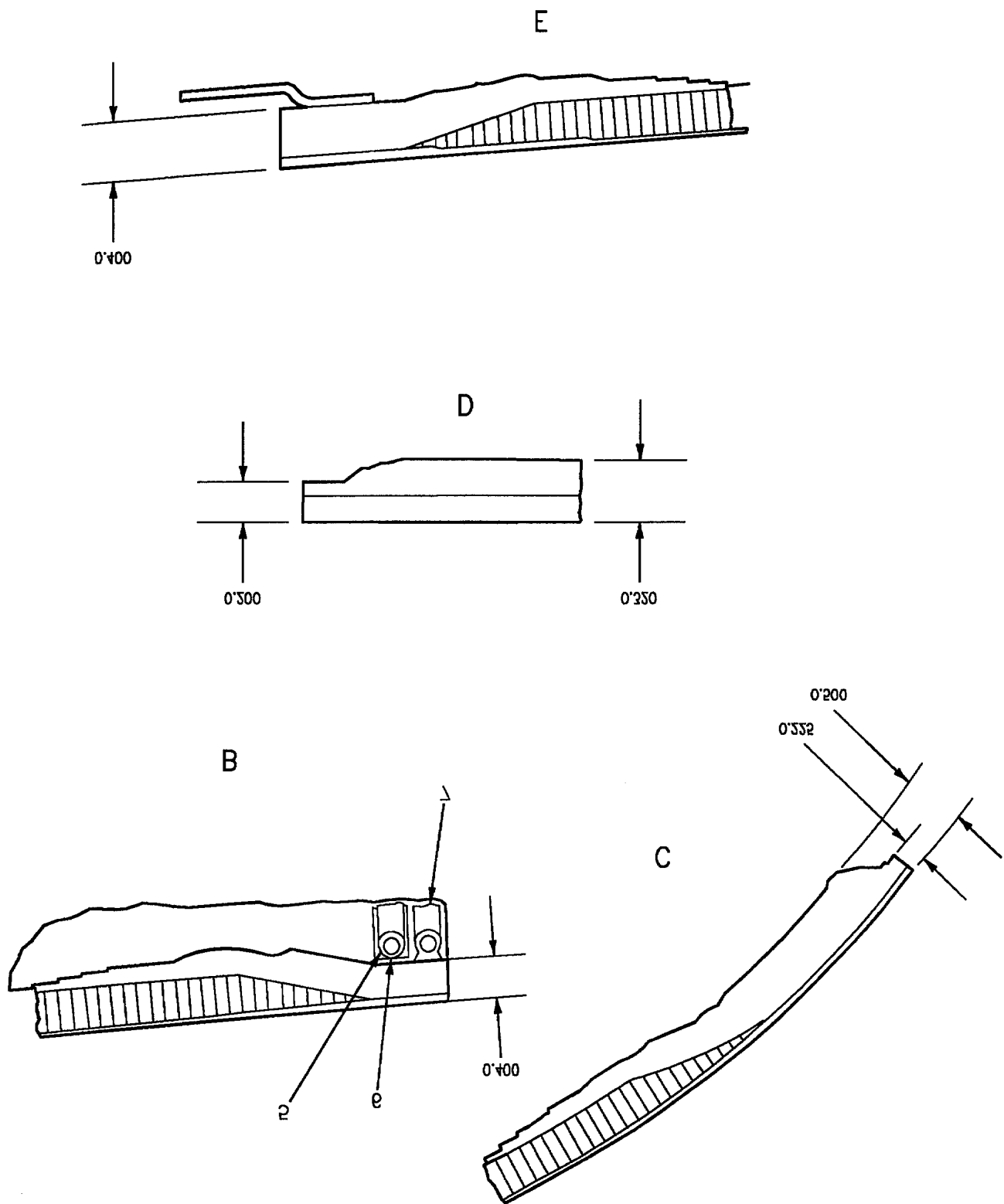


Figure 1. Material Index (Sheet 3)

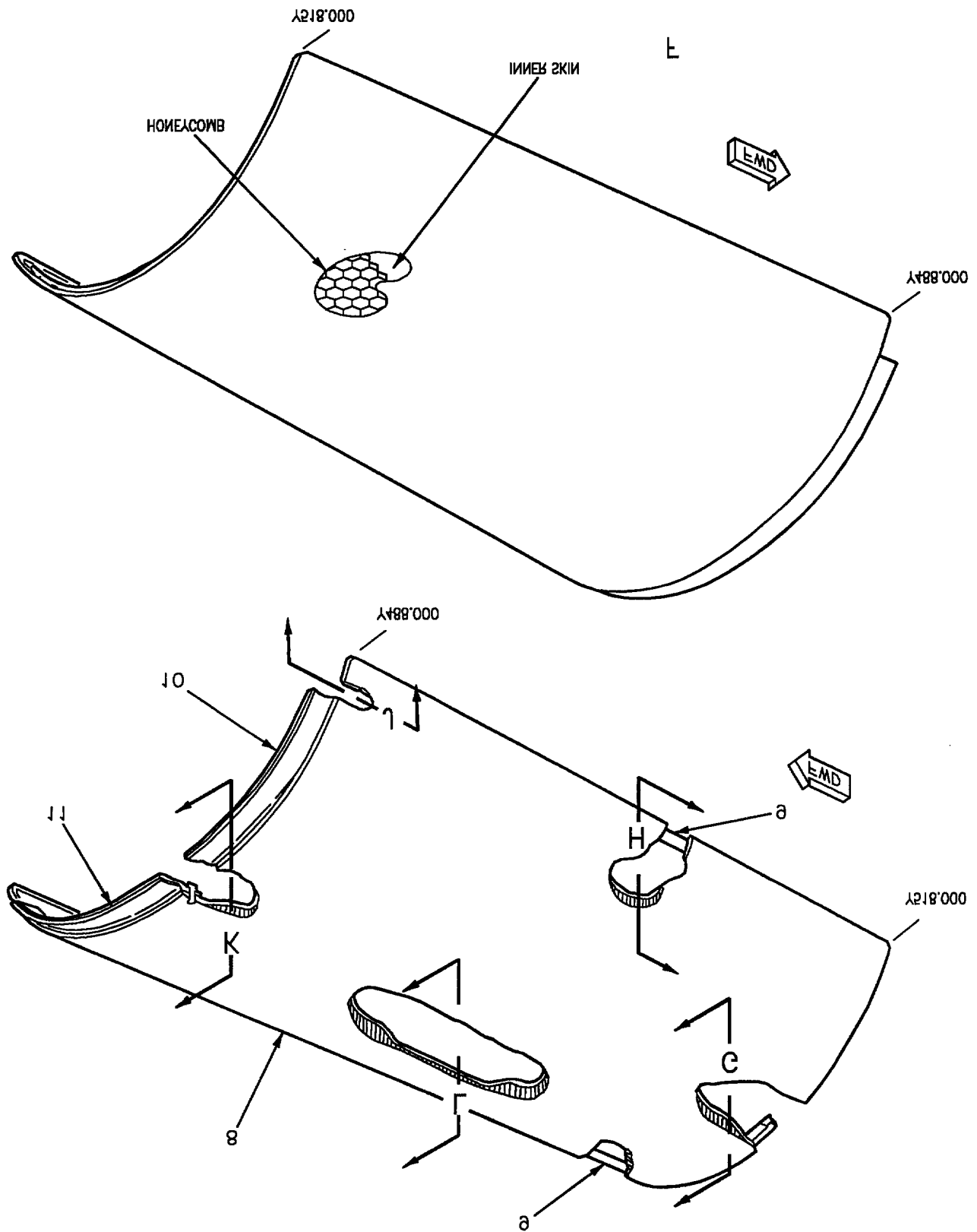


Figure 1. Material Index (Sheet 4)

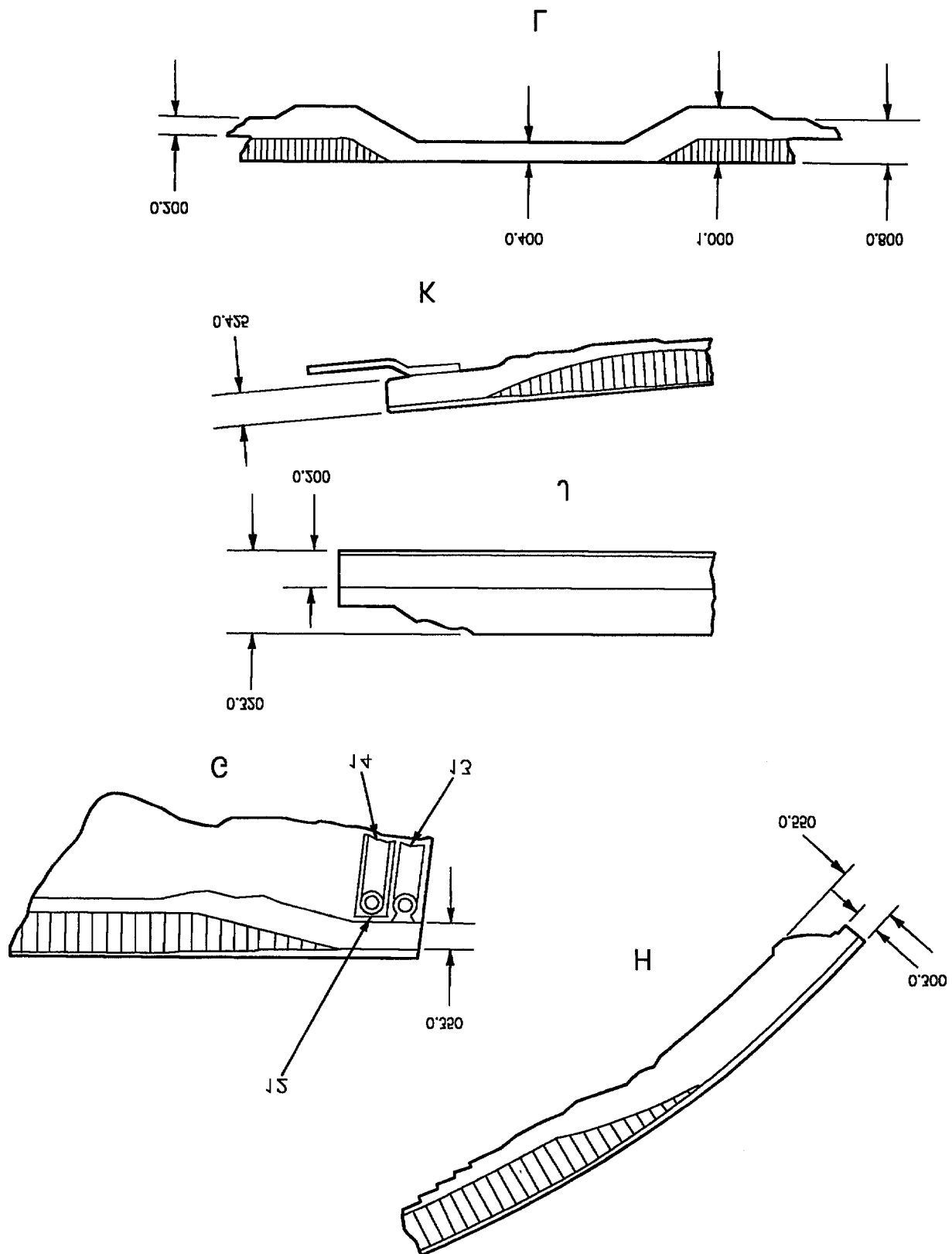


Figure 1. Material Index (Sheet 5)

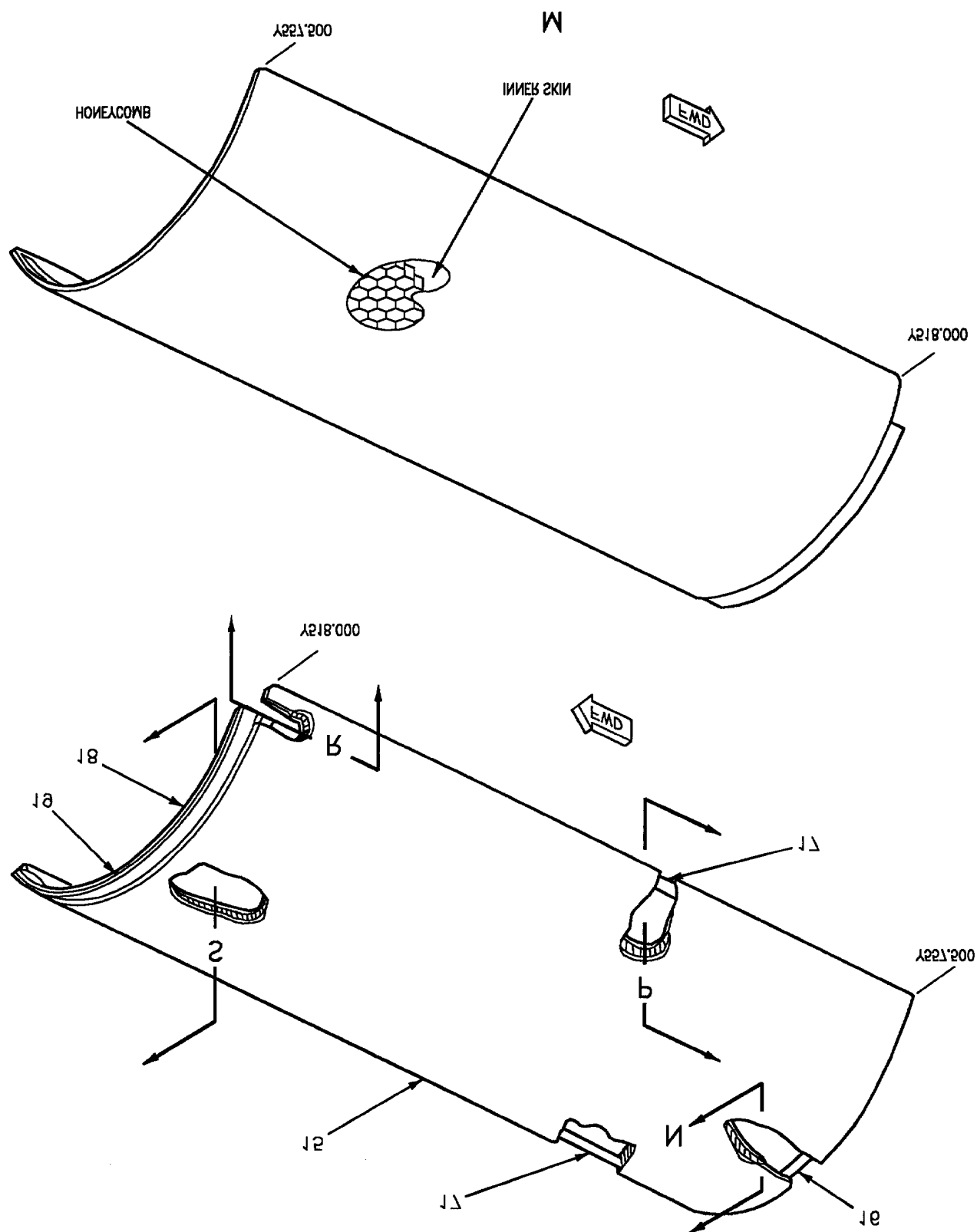


Figure 1. Material Index (Sheet 6)

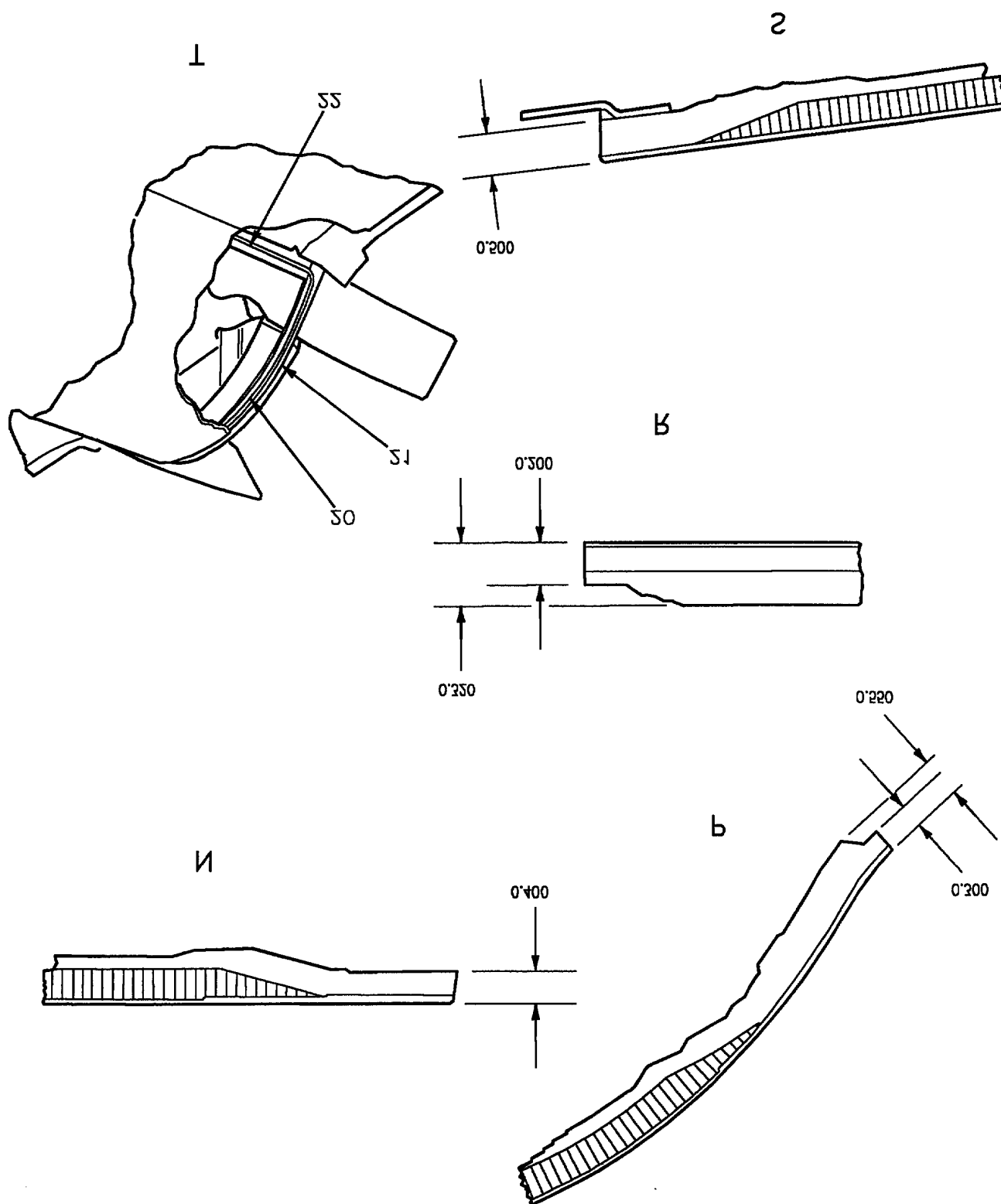


Figure 1. Material Index (Sheet 7)























Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Cover (Door 40) 74A324657-1001 74A324657- 1005		
2		Rub Strip 74A324657-2059	0.005 Sheet	Ti-70 Anl
3		Lip 74A321666-2005 74A324657-2049	0.050 Sheet 	7075-T6 Alclad 
4		Rub Strip 74A324657-2057	0.005 Sheet	Ti-70 Anl
5		 EMI Seal 74A324657-2065	11M967-1 Extr	Silicone Rubber
6		Rub Strip 74A324657-2063	0.005 Sheet	Ti-70 Anl
7		Seal 74A324657-2067	11M966-1 Extr	Silicone Rubber
8		Cover (Door 43) 74A324662-1001 74A324662-1005		
9		Rub Strip 74A324662-2069	0.005 Sheet	Ti-70 Anl
10		Lip 74A321666-2007 74A324662-2057	0.050 Sheet 	7075-T6 Alclad 
11		Rub Strip 74A324662-2065	0.005 Sheet	Ti-70 Anl
12		Rub Strip 74A324662-2071	0.005 Sheet	Ti-70 Anl
13		Seal 74A324662-2075	11M966-1 Extr	Silicone Rubber
14		 EMI Seal 74A324662-2073	11M967-1 Extr	Silicone Rubber
15		Cover (Door 49) 74A324667- 1003 74A324667-1005 74A324667-1007		
16		Rub Strip 74A324667-2073	0.005 Sheet	Ti-70 Anl

Figure 1. Material Index (Sheet 8)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
17		Rub Strip 74A324667-2069	0.005 Sheet	Ti-70 Anl
18	 	Lip 74A321666-2009 74A324667-2057	0.050 Sheet 	7075-T6 Alclad
19		Rub Strip 74A324667-2065	0.005 Sheet	Ti-70 Anl
20	 	EMI Seal 74A321660-2037 74A321660-2021	11M971-1 Extr	Silicone Rubber
21		Rub Strip 74A321660-2019	0.005 Sheet	Ti-70 Anl
22	 	Rub Strip 74A321660-2005 74A321660-2033	0.005 Sheet	Ti-70 Anl
<p style="text-align: center;">LEGEND</p> <p> The assembly is made up of 5056-H39 aluminum alloy honeycomb and skins of various thickness of graphite epoxy laminate.</p> <p> 161706 AND UP.</p> <p> 161525 THRU 161705.</p> <p> F/A-18B.</p> <p> Bonded to structure.</p> <p> F/A-18A.</p> <p> Bonded to cover.</p> <p> 161738 AND UP.</p> <p> 161353 THRU 161524.</p> <p> 161353 THRU 161737.</p> <p> The assembly is made up of various thicknesses of graphite epoxy laminate and glass epoxy laminate.</p> <p> F/A-18B 161354 AND UP. F/A-18A 161716 AND UP.</p> <p> F/A-18A 161353 THRU 161715.</p> <p> 161353 THRU 161705.</p> <p> F/A-18A 161353 THRU 162909 BEFORE F/A-18 AFB-105. AFTER F/A-18 AFB-105; 162826 THRU 162835, 162837, 162873 THRU 162884, AND 162888 THRU 162909, Rub Strip has been replaced with tin/ zinc metal spray.</p>				

Figure 1. Material Index (Sheet 9)

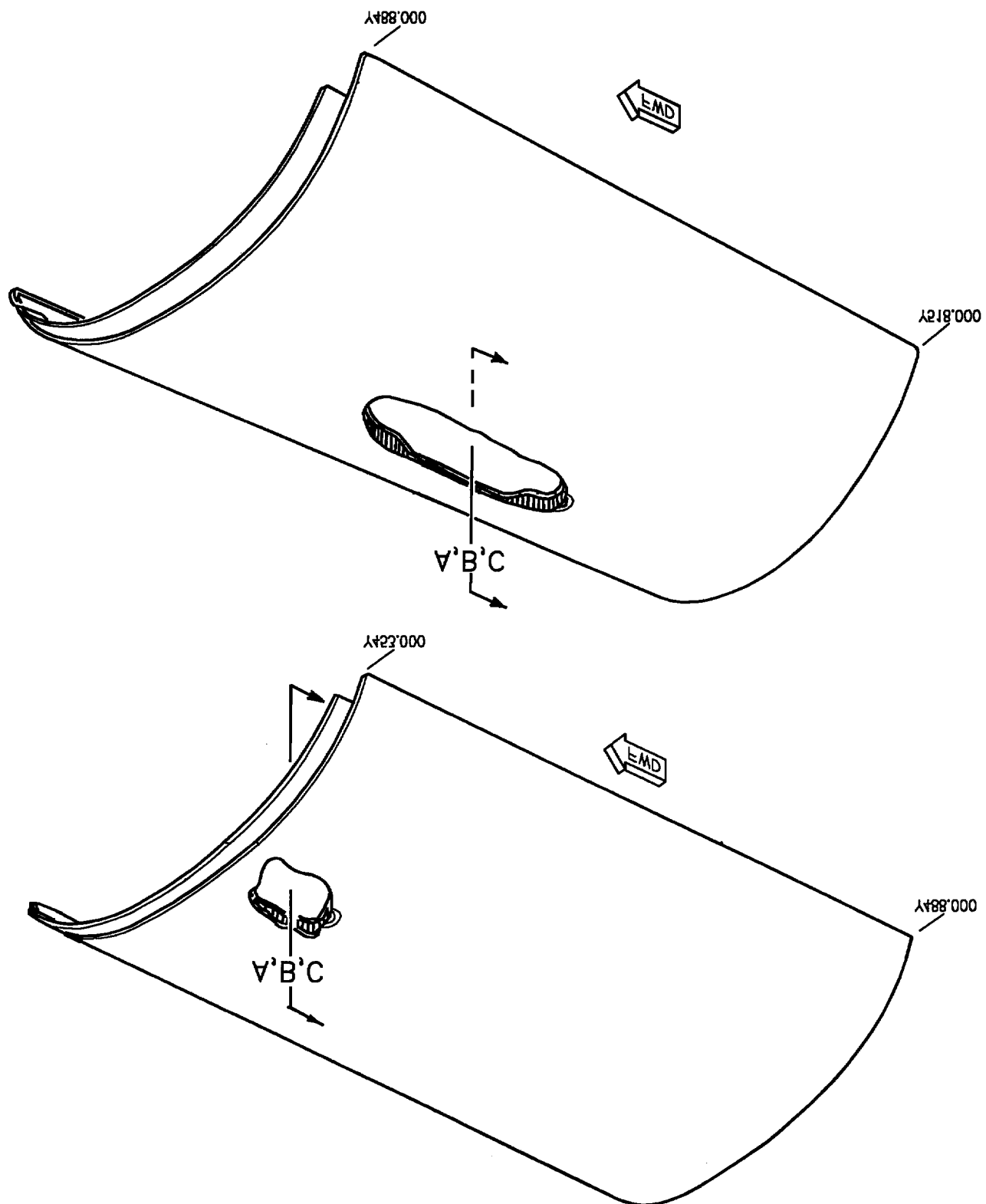


Figure 2. Negligible Damage (Sheet 1)

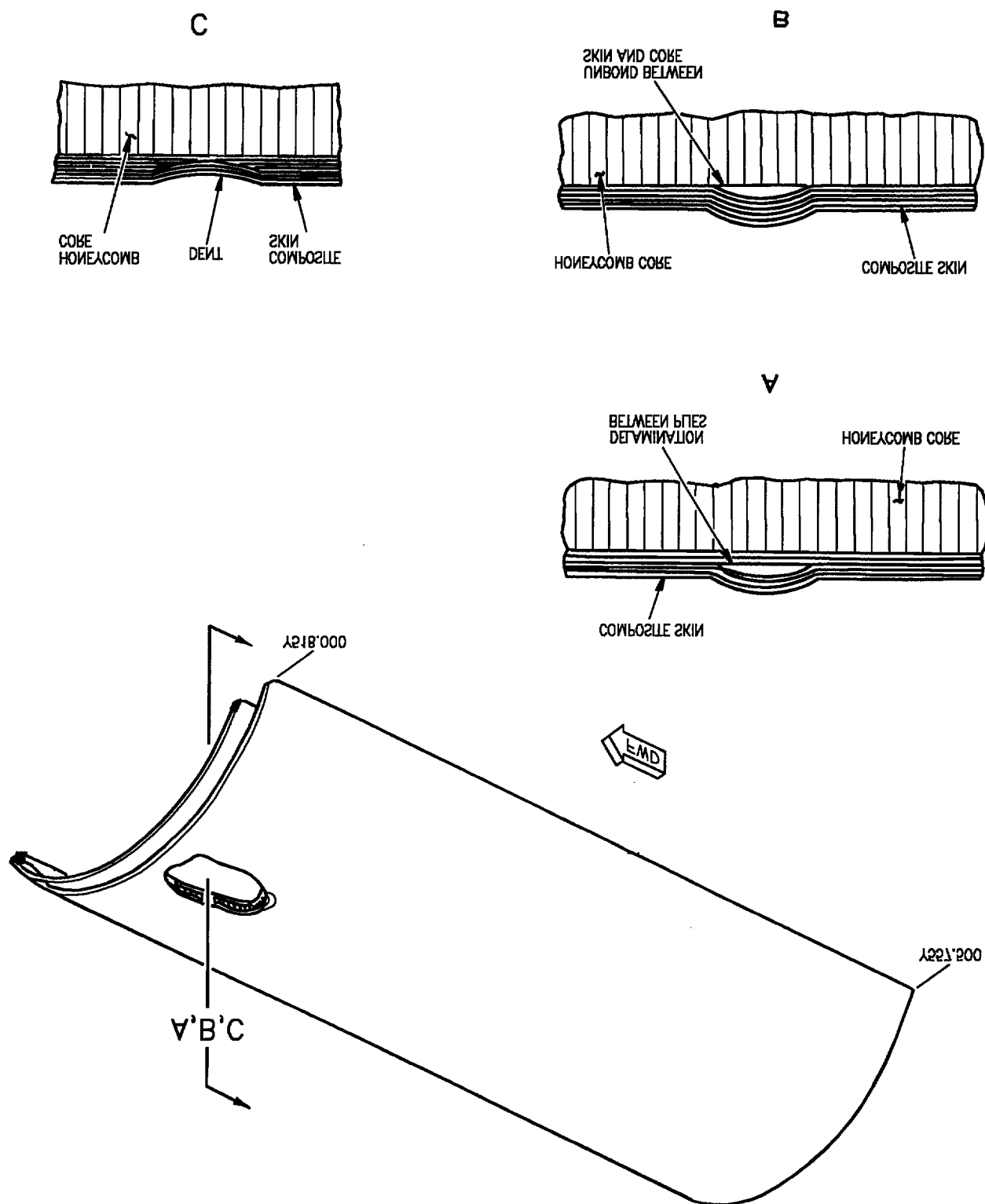


Figure 2. Negligible Damage (Sheet 2)

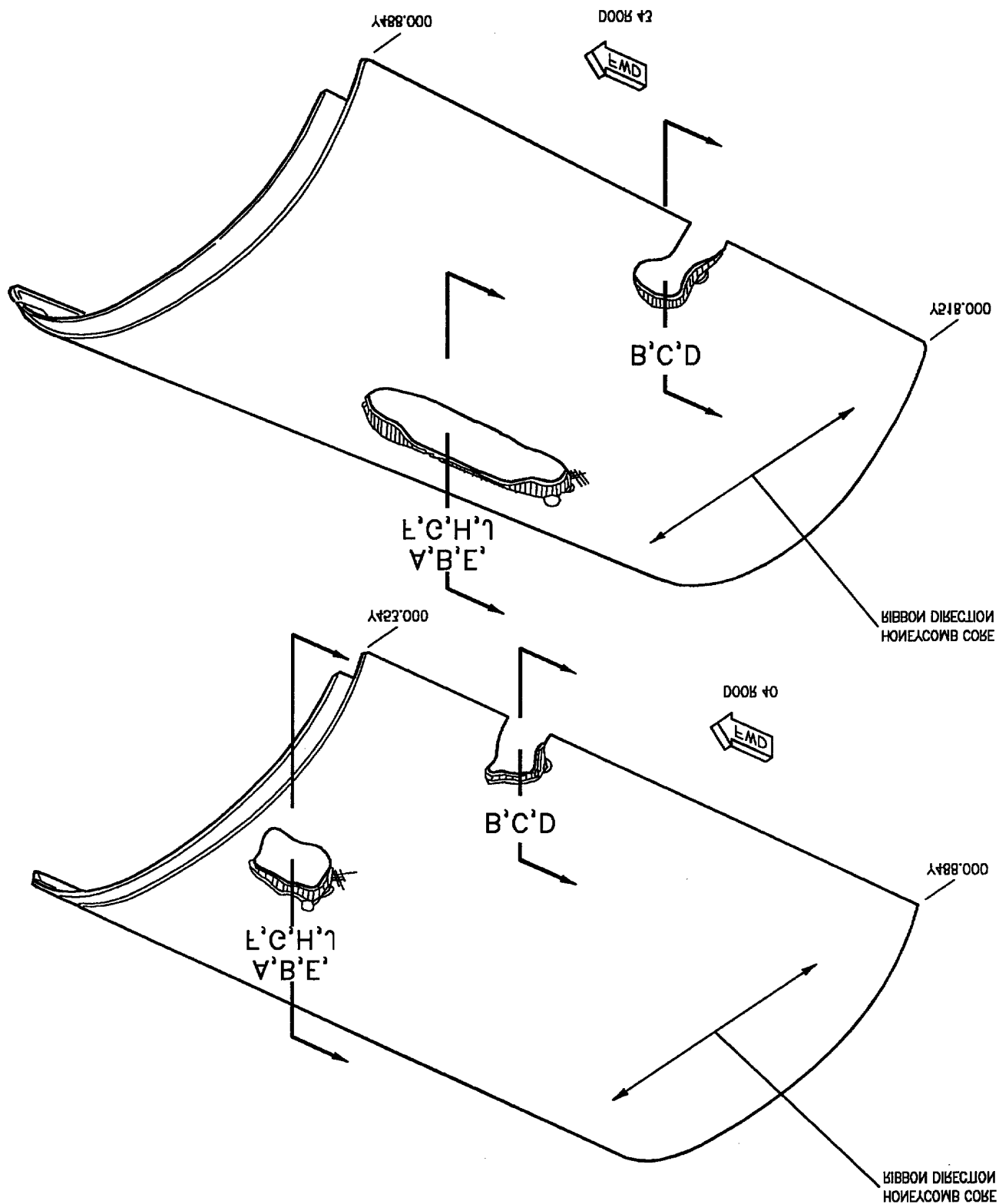


Figure 3. Repairable Damage (Sheet 1)

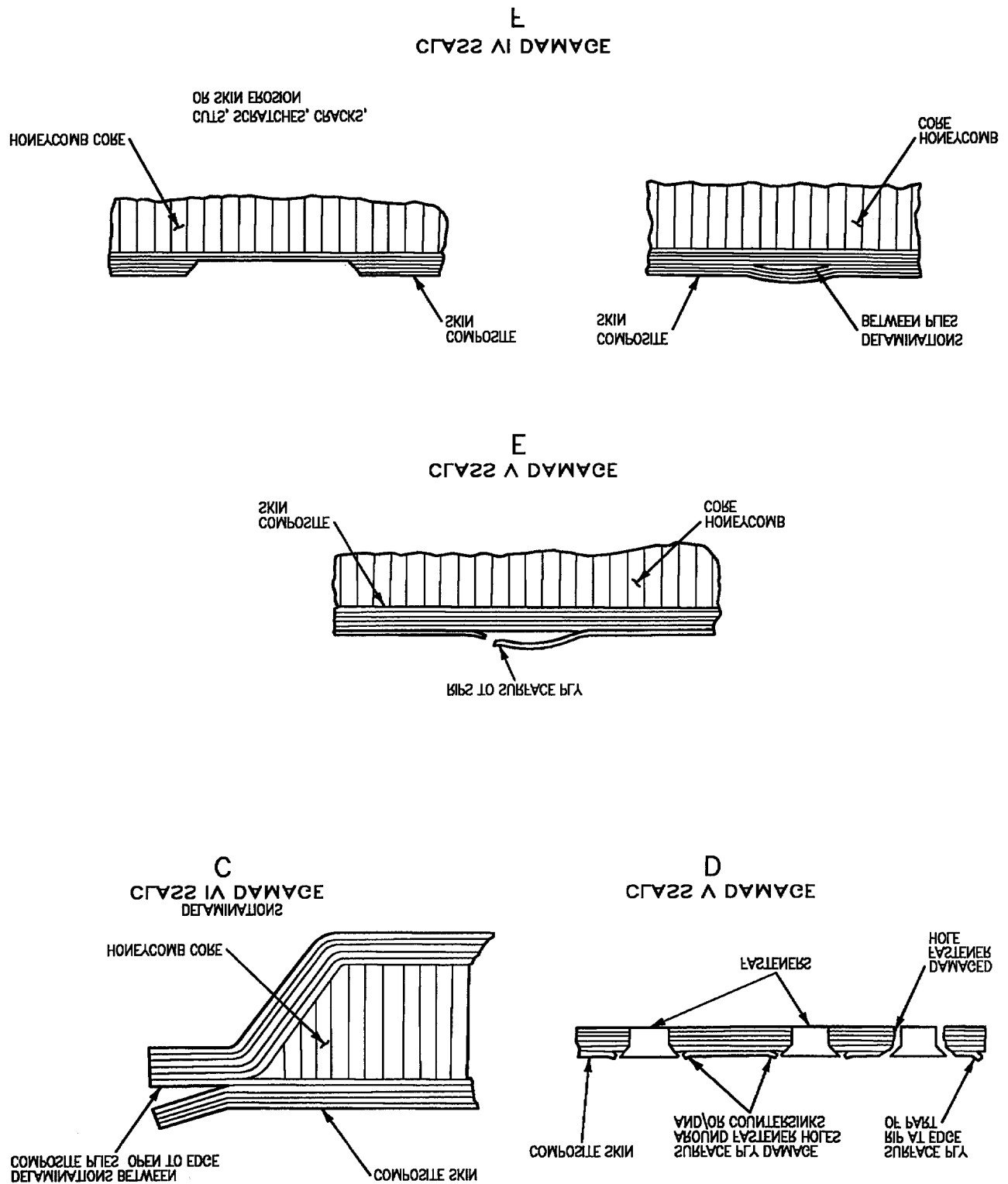


Figure 3. Repairable Damage (Sheet 3)

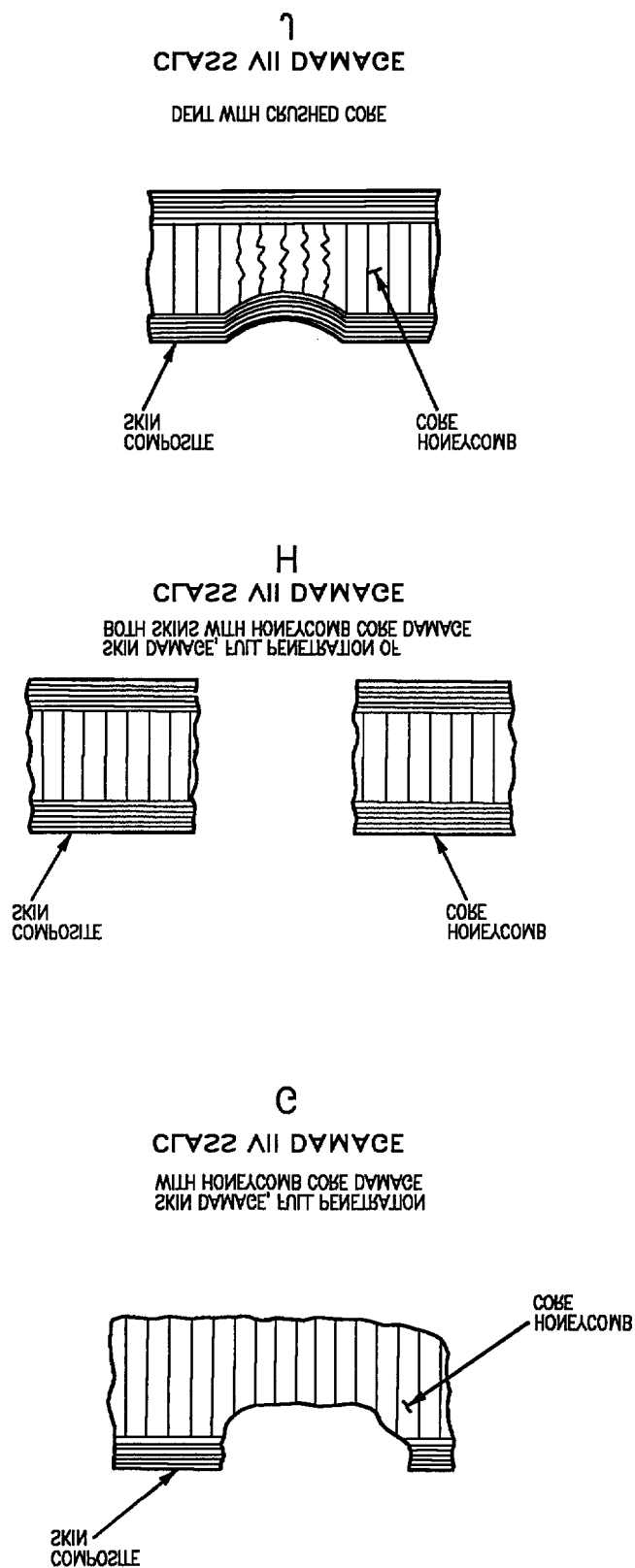


Figure 3. Repairable Damage (Sheet 4)

28. REPLACEMENTS.

29. EMI Electrical Bonding Pressure Sensitive Tape, Doors 40, 43 and 49. EMI protection pressure sensitive tape damaged beyond acceptable specified limits (A1-F18AC-LMM-010) shall be replaced. For door 40, see figure 4. For door 43, see figure 5. For door 49, see figure 6.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Tape, Pressure Sensitive, 2 in. width	Y427
Methyl Ethyl Ketone	TT-M-261
Cheesecloth	CCC-C-440 Type 1 Class 1

a. Remove damaged tape.



Methyl Ethyl Ketone

1

b. Clean surface where tape will be applied using clean cheesecloth moistened with methyl ethyl ketone.

c. Cut tape, P/N Y427 to required length.

d. Apply tape to designated area on door, figure 4, 5 or 6.

30. On F/A-18A 161353 THRU 161968, 161970 THRU 161977, AND 161981; F/A-18B 161354 THRU 161943, corrosion is possibly forming on structure under doors because of type form in place seal installed in production. When found: remove, clean up corrosion, and replace form in place seal (A1-F18AC-SRM-500, WP005 02). After form in place seal has been replaced on aircraft noted above and also on F/A-18A 161969, 161978 THRU 161980, 161982 AND UP; F/A-18B 161947 AND UP, maintain, repair or replace form in place seal (A1-F18AC-SRM-500, WP005 02). Fastener attaching hardware is shown for covers below:

a. Cover, door 40, is interchangeable. Fastener attaching hardware is shown on figure 4. For fasteners (A1-F18AC-SRM-430, FIG 007 00). For replacement rivets, attaching plate nuts (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

b. Cover, door 43, is interchangeable. Fastener attaching hardware is shown on figure 5. For fasteners (A1-F18AC-SRM-430, FIG 007 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

c. Cover, door 49, is interchangeable. Fastener attaching hardware is shown on figure 6. For fasteners (A1-F18AC-SRM-430, FIG 007 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

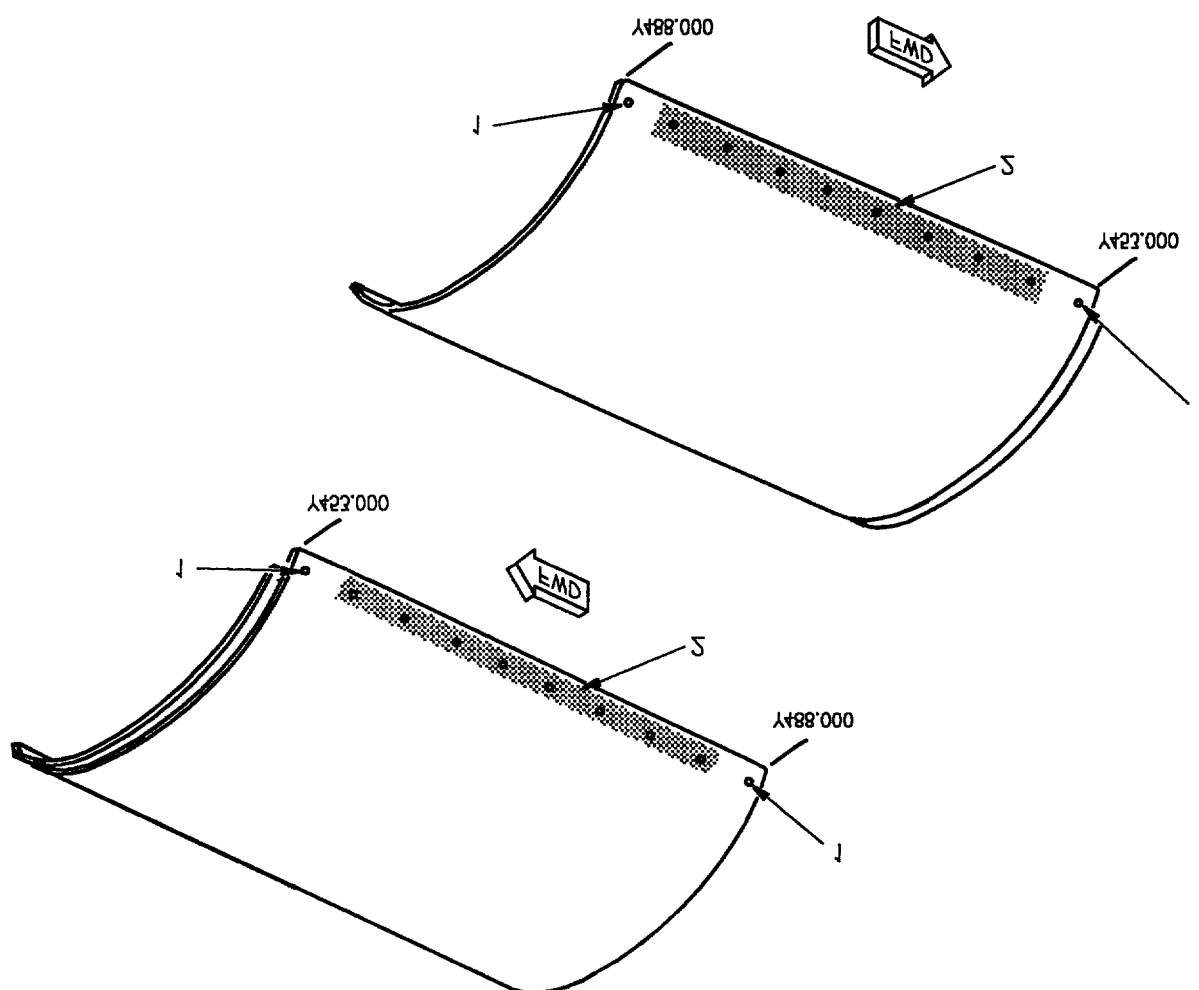


Figure 4. Cover (Door 40) Replacement (Sheet 1)





Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F50403-4-1
2			Plate Nut	F50403-4-2
LEGEND				
 Hole diameter in cover is 0.281 +0.020 -0.0000 and 0.281 +0.006 -0.000 in structure.				
 Y427 aluminum foil tape, 2 inch wide, around periphery of inner surface.				

Figure 4. Cover (Door 40) Replacement (Sheet 2)

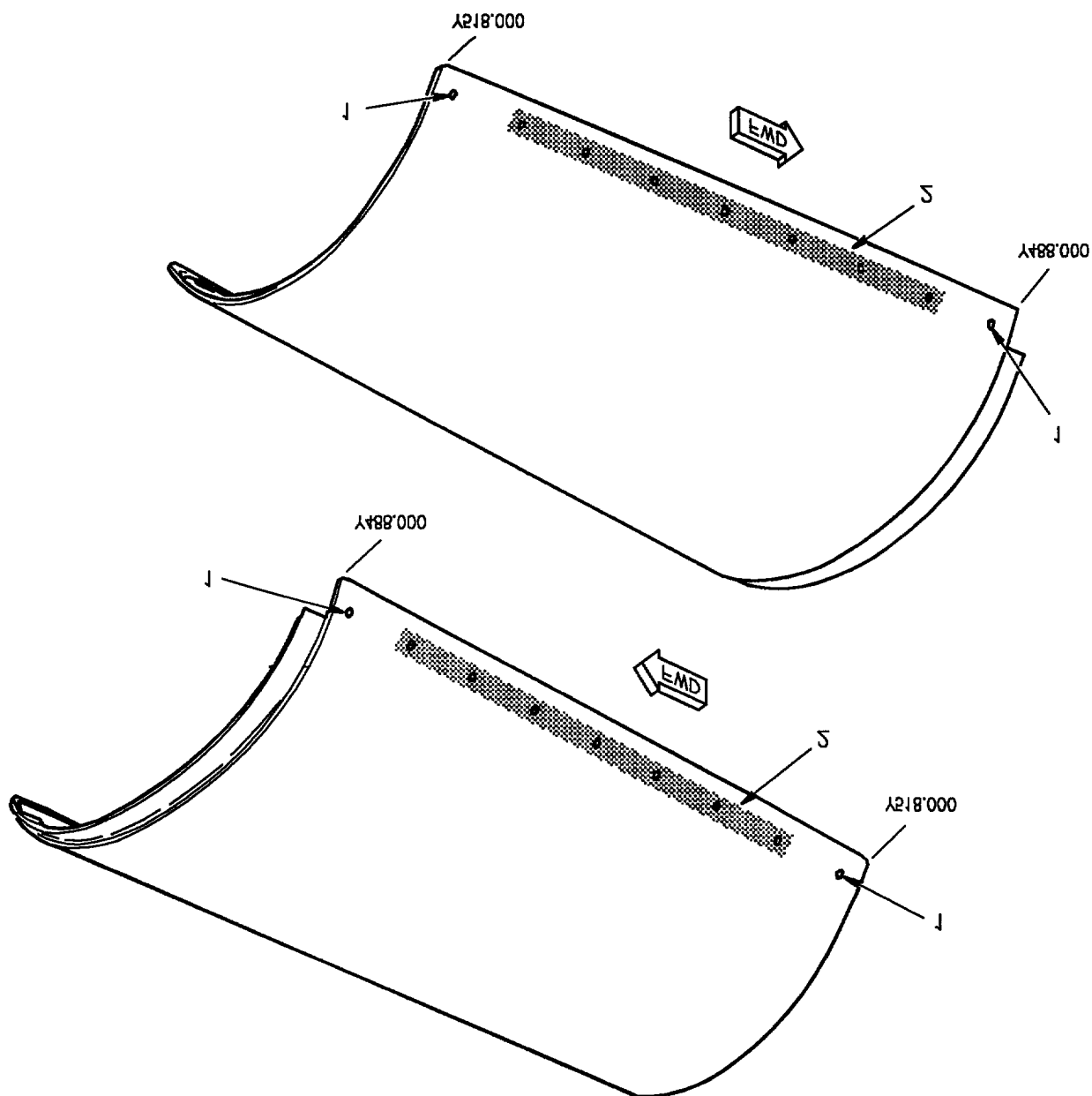


Figure 5. Cover (Door 43) Replacement (Sheet 1)





Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F50403-4-1
2			Plate Nut	F50403-4-2
LEGEND				
 Hole diameter in cover is 0.281 +0.020 -0.0000 and 0.281 +0.006 -0.000 in structure.				
 Y427 aluminum foil tape, 2 inch wide, around periphery of inner surface.				

Figure 5. Cover (Door 43) Replacement (Sheet 2)

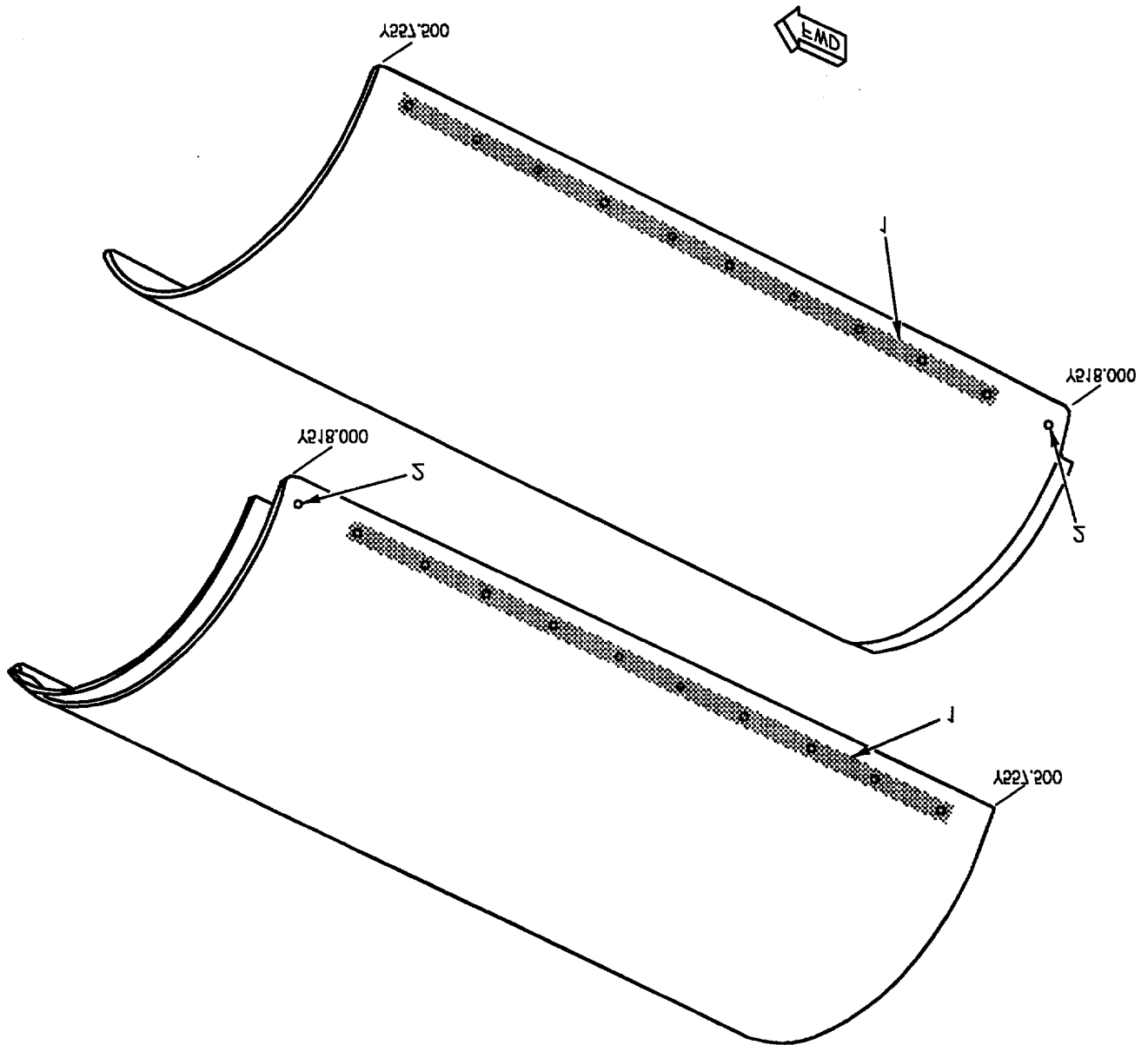


Figure 6. Cover (Door 49) Replacement (Sheet 1)





Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F50403-4-2
2			Plate Nut	F50403-4-1
LEGEND				
 Hole diameter in cover is 0.281 +0.020 -0.0000 and 0.281 +0.006 -0.000 in structure.				
 Y427 aluminum foil tape, 2 inch wide, around periphery of inner surface.				

Figure 6. Cover (Door 49) Replacement (Sheet 2)

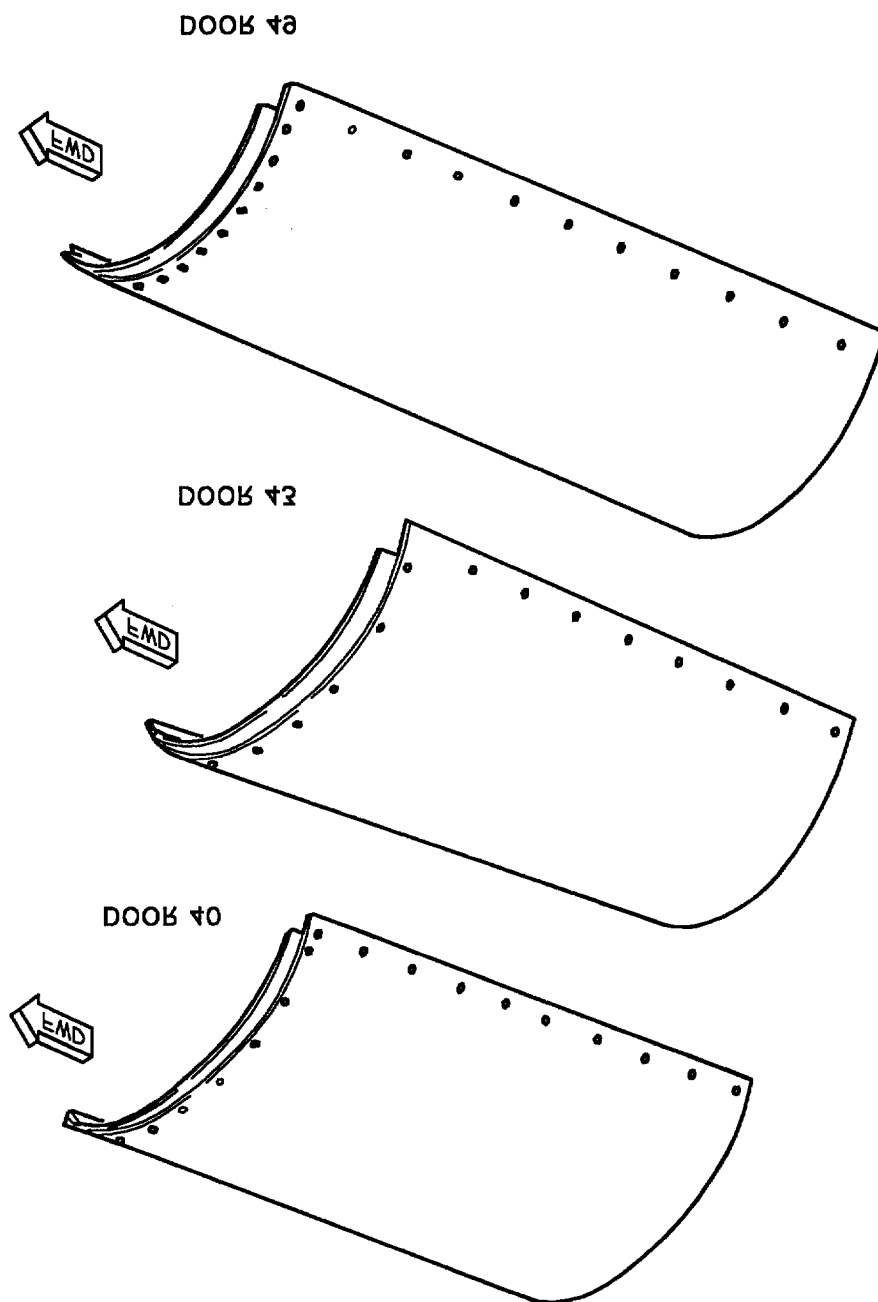


Figure 7. Fastener Hole Repair, Doors 40, 43, and 49

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE ALCLAD SKIN AND ALUMINUM HONEYCOMB CORE COVER (DOOR 55)

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Form In Place Sealing	WP010 00
Aft Center Fuselage Finish System and Markings	WP033 00
Structure Illustrated Parts Breakdown, Center Fuselage	A1-F18AC-SRM-430
Fuselage Section Segment, Ctr, Y453.000 to Y557.500	FIG 010 00
Structure Repair, General Information	A1-F18AC-SRM-200
Gang Channel Identification and Repair	WP004 05
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Water Removal	WP005 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class I Damage Repair	WP022 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class II Damage	WP023 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class III Damage	WP024 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class IV Damage	WP025 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class V Damage	WP026 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class VI Damage	WP027 00
Aluminum or Titanium Skin and Aluminum Honeycomb Core, Class VII Damage	WP028 00
Blending	WP038 00
Aircraft Weapons System Cleaning and Corrosion Control	NAVAIR 01-1A-509

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Repairable Damage	2
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Alphabetical Index (Continued)

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Damage More than 1.5 Inches Length or Diameter, Up to 4.0 Inches Maximum, to Both Skins, Class VII Damage	3
Damage More than 1.5 Inches Length or Diameter, Up to 4.0 Inches Maximum to One Skin, Class V Damage	3
Dents, with Honeycomb Core Damage, Class III Damage	3
Dents without Honeycomb Core Damage, Class II Damage	3
Voids or Unbonds Between Skin and Honeycomb Core, Class I Damage	3
Water in Honeycomb Core, Class X Damage	3
Repairs	4
Replacements	4

Record of Applicable Technical Directives

None

Support Equipment Required

None

b. Smooth dents free of sharp corners and abrasions; 0.015 inch in depth and not exceeding 0.5 inch in width provided:

Materials Required

None

(1) No more than three dents occur in any 3 inch diameter circle.

1. **DAMAGE EVALUATION.** See figures 1 and 2.

(2) No more than six dents occur in any 10 inch diameter circle.

2. Damage is classified as negligible and repairable. Locating and determining size of damage by NDI is intermediate maintenance. Damage not listed or exceeding following limits requires depot engineering disposition.

4. **REPAIRABLE DAMAGE.** See figures 2 and 4. Types and limits of damage are listed below and in table 2. Figure and index numbers in table 2 coincide with figure and index numbers in material index.

3. **NEGLIGIBLE DAMAGE.** See figure 3. Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches (NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

NOTE

Limits in table 2 apply after blending the damage.

a. Scratches.

a. Scratches are not allowed within one diameter from edge of any hole.

(1) Any scratches within one diameter of any hole must be blended out. Minimum blend out is one diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.

5. Voids or Unbonds Between Skin and Core, Class I Damage. See figure 4, section A.

a. Falls within 4.0 inch diameter circle.

b. Damaged area is not greater than 4 percent of bonded area.

6. Dents Without Honeycomb Core Damage, Class II Damage. See figure 4, section B.

a. Cannot be enclosed in 0.5 inch diameter circle, but falls within 1.5 inch diameter circle.

b. Depth is 0.015 to 0.050 inch.

c. Core is not crushed or unbonded.

7. Dents With Honeycomb Core Damage, Class III Damage. See figure 4, section C.

a. Cannot be enclosed in 0.50 inch diameter circle, but falls within 1.5 inch diameter circle.

b. Depth is 0.015 to 0.050 inch.

c. Core is crushed or unbonded.

8. Damage Less Than 1.5 Inches Length or Diameter To One Skin, Class IV Damage. This class includes cracks, bulges, punctures, and sharp dents. See figure 4, section D.

a. Damage is to one skin.

b. Crack is no longer than 1.5 inches.

c. Bulges, punctures, or sharp dents fall within 1.5 inch diameter circle.

d. Core may be damaged or undamaged.

9. Damage More Than 1.5 Inches Length or Diameter, Up To 4.0 Inches Maximum, To One Skin, Class V Damage. This class includes cracks, bulges, punctures, and sharp dents. See figure 4, section G.

a. Damage is to one skin.

b. Crack is 1.5 to 4.0 inches in length.

c. Bulges, punctures, and dents cannot be enclosed in 1.5 inch diameter circle, but fall within 4.0 inch diameter circle.

d. Core damage of any kind exists.

10. Damage Less Than 1.5 Inches Length or Diameter To Both Skins, Class VI Damage. This class includes cracks, bulges, punctures, and sharp dents. See figure 4, section F.

a. Damage is to both skins.

b. Crack is no longer than 1.5 inches.

c. Bulges, punctures, and sharp dents fall within 1.5 inch diameter circle.

d. Core damage of any kind exists.

11. Damage More Than 1.5 Inches Length Or Diameter, Up To 4.0 Inches Maximum, To Both Skins, Class VII Damage. This class includes cracks, bulges, punctures, and sharp dents. See figure 4, detail E.

a. Damage is to both skins.

b. Crack is 1.5 to 4.0 inches in length.

c. Bulges, punctures, and dents cannot be enclosed in 1.5 inch diameter circle, but fall within 4.0 inch diameter circle.

d. Core damage of any kind exists.

12. Water In Honeycomb Core, Class X Damage. Class X damage is water trapped in honeycomb core.

13. REPAIRS.

14. Blend scratches, nicks, gouges, or corrosion (A1-F18AC-SRM-250, WP038 00). If, after blending, damage limits of table 2 are exceeded, repair damage per class IV or class V damage. Classes I, II, III, IV, VI, and X are organizational maintenance. Class V and VII are intermediate maintenance. Refinish any repaired area (A1-F18AC-SRM-500, WP033 00). Damage may be repaired per procedures referenced below.

a. Repair class I damage and install patch (A1-F18AC-SRM-250, WP022 00).

b. Repair class II damage and install patch (A1-F18AC-SRM-250, WP023 00).

c. Repair class III damage and install patch (A1-F18AC-SRM-250, WP024 00).

d. Repair class IV damage and install patch (A1-F18AC-SRM-250, WP025 00).

e. Repair class V damage and install patch (A1-F18AC-SRM-250, WP026 00).

f. Repair class VI damage and install patch (A1-F18AC-SRM-250, WP027 00).

g. Repair class VII damage and install patch (A1-F18AC-SRM-250, WP028 00).

h. Repair class X damage (A1-F18AC-SRM-250, WP005 00).

15. REPLACEMENTS.

16. Fastener attaching hardware is shown for cover, door 55, on figure 5. The cover is interchangeable. For fasteners (A1-F18AC-SRM-430, FIG010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching plate nuts and gang channels not shown (A1-F18AC-SRM-200, WP004 05).

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (2)	Door 55 Outer Skin	0.020	0.0006	0.0006	100%	0.015	NA
	Zone B4 Zone B4	0.080	0.0006	0.0006	100%	0.015	NA
Fig 1 (3)	Door 55 Inner Skin Zone B4	0.020	0.0006	0.0006	100%	0.015	NA

Table 2. Repairable Damage Limits After Blending

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (2)	Door 55 Outer Skin	0.020	0.004	0.004	20%	0.004	20%
	Zone B4	0.080	0.016	0.016	20%	0.016	20%
Fig 1 (3)	Door 55 Inner Skin	0.020	0.004	0.004	20%	0.004	20%
	Zone B4						

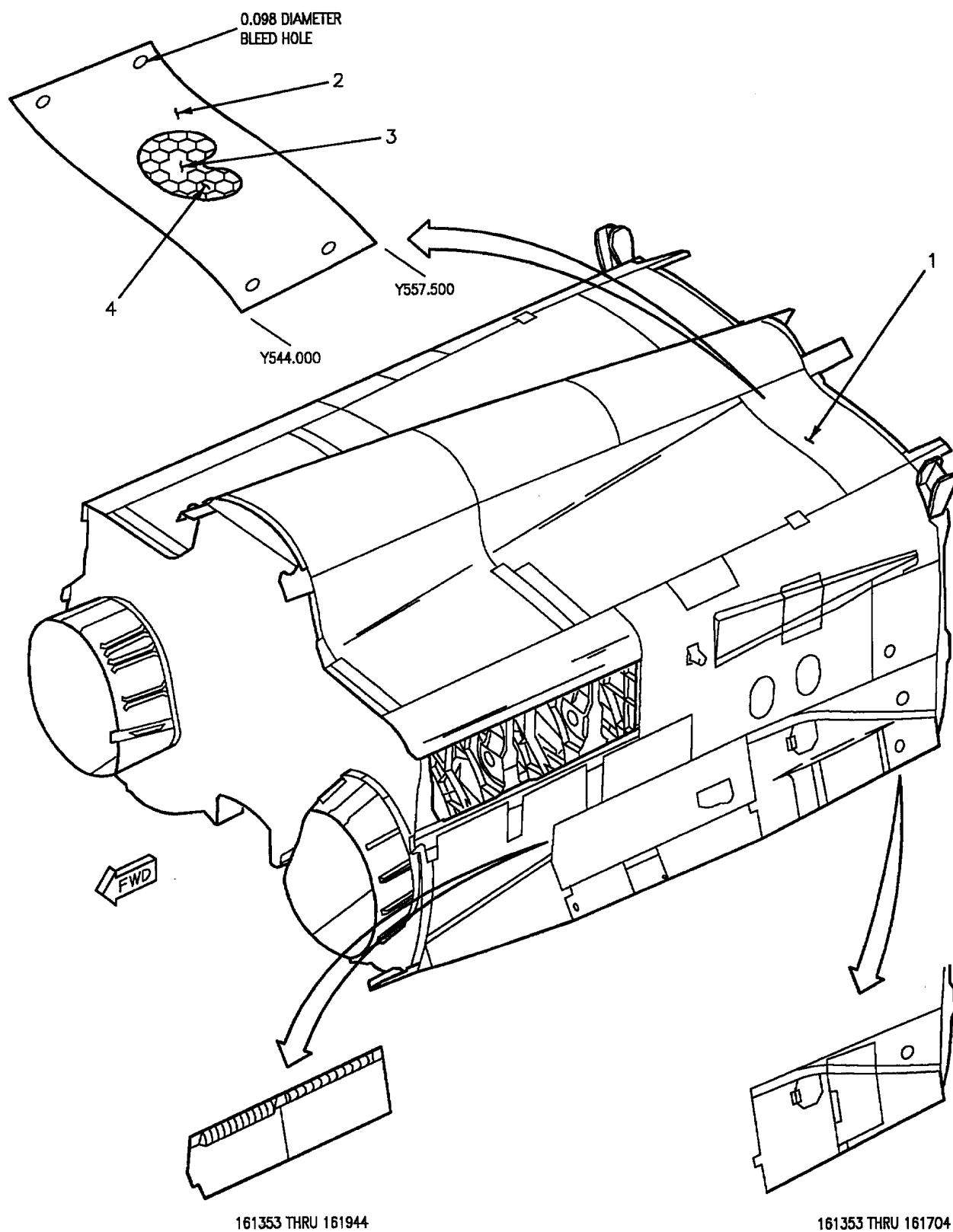


Figure 1. Material Index (Sheet 1)











Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Cover (Door 55) 74A324629-1003, -1004 74A324629- 1009, -1010	Bonded Assembly	7075-T 76 Alclad
2		Outer Skin (Door 55) 74A324630-2001, -2002		7075-T76 Alclad
3		Inner Skin (Door 55) 74A324682-2001, -2002 74A324682-2003, -2004	0.020 Sheet	7075-T62 Al Aly
4		Core 74A324631-2001, -2002		5056-H39 Al Aly
<p style="text-align: center;">LEGEND</p> <p> Land is 0.080 and bay is 0.020.</p> <p> Eighty cells per foot, 0.0020 inch thick foil.</p> <p> 161353 THRU 161705, 161714 AND UP.</p> <p> 161706 THRU 161713.</p> <p> 161353 THRU 161741.</p> <p> 161742 AND UP.</p>				

Figure 1. Material Index (Sheet 2)

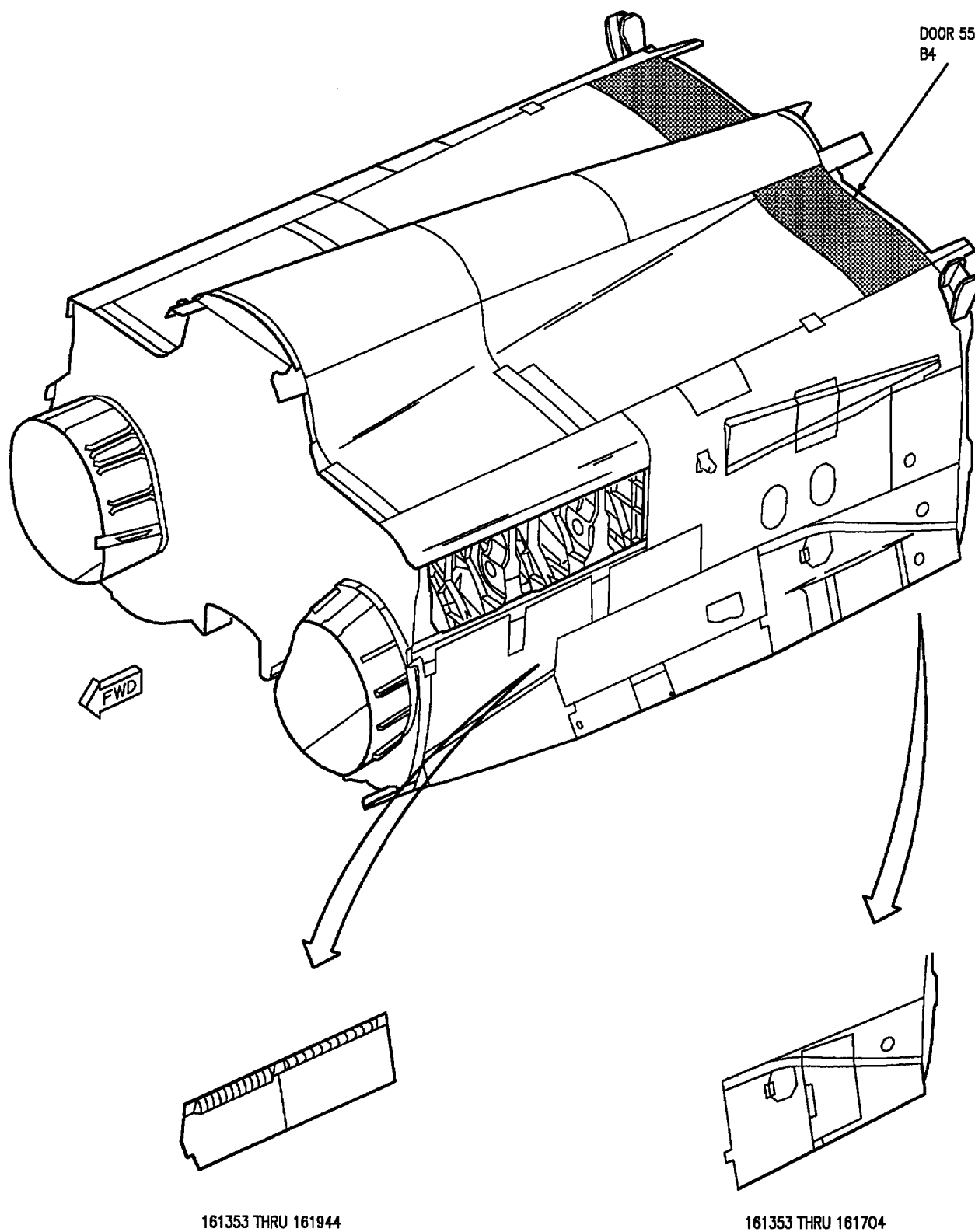
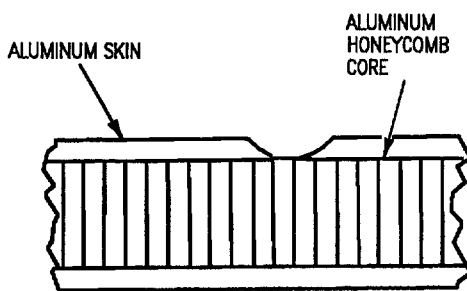
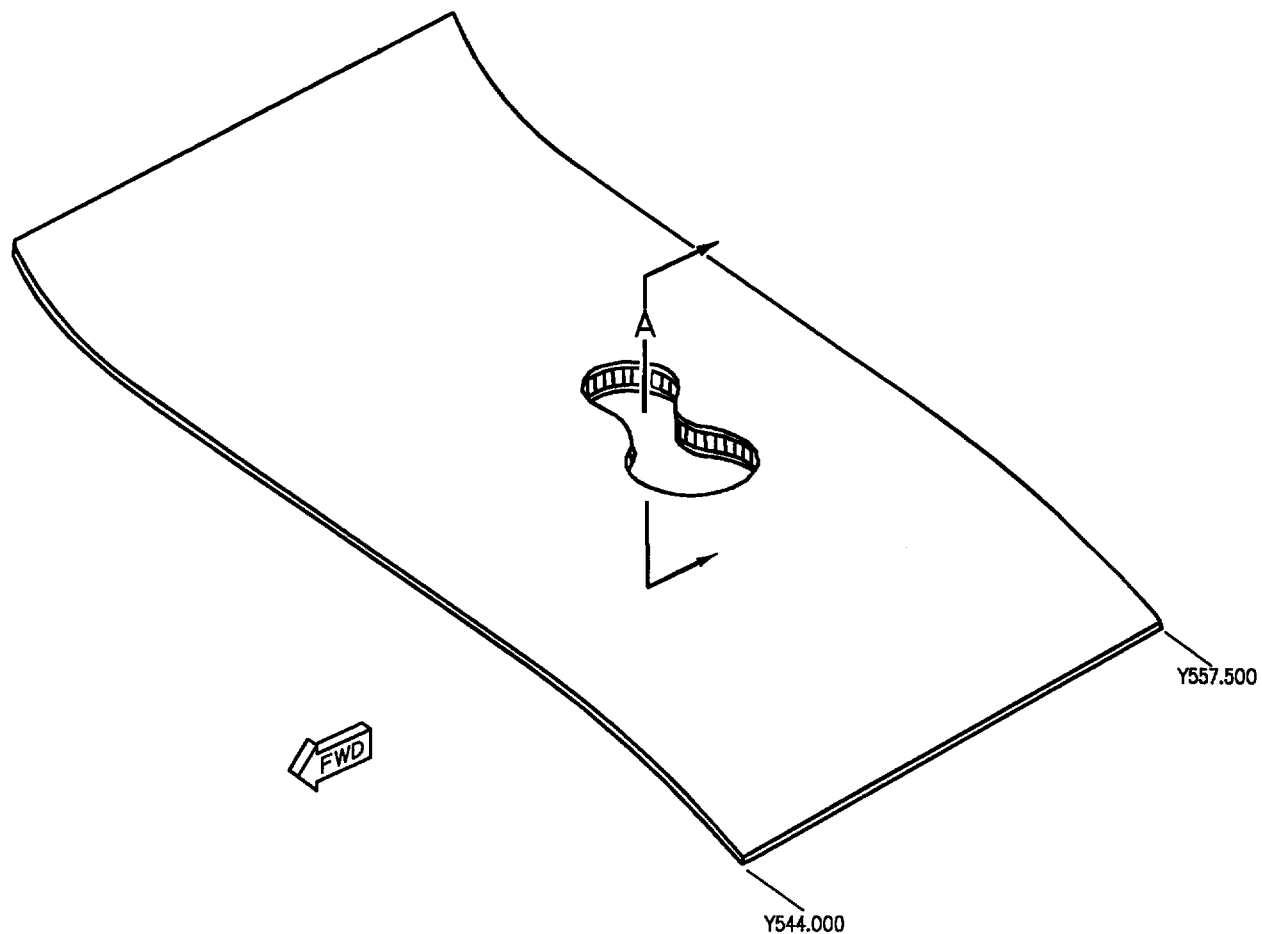


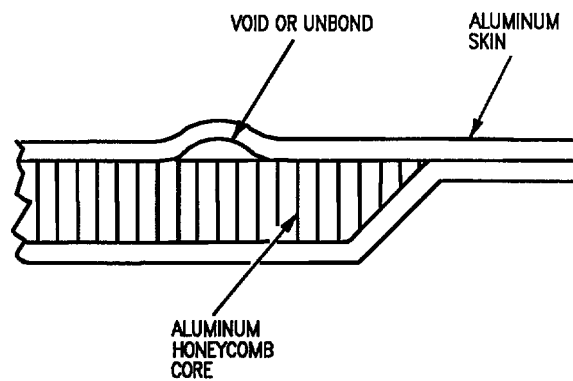
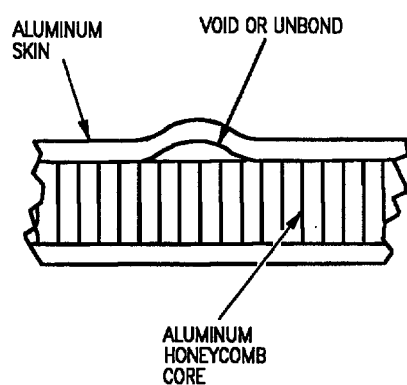
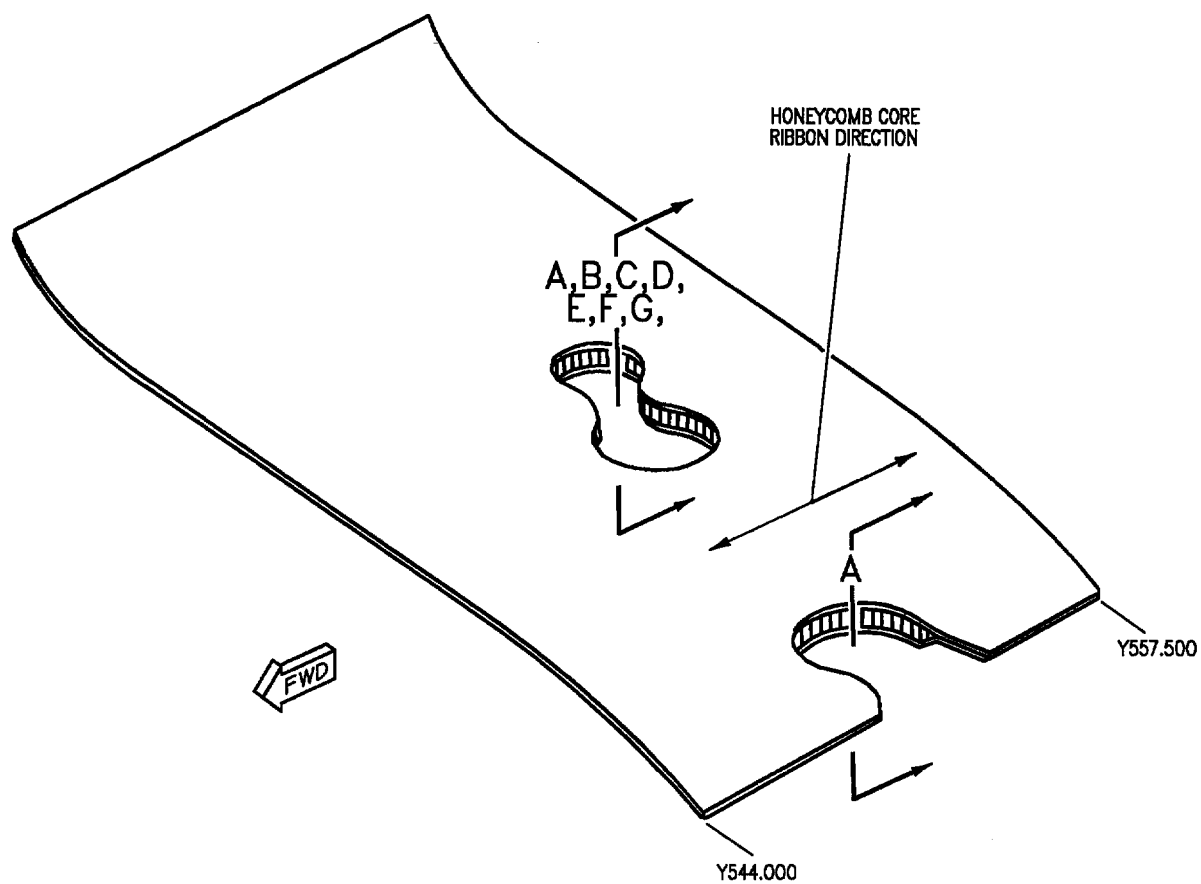
Figure 2. Repair Zones



DENT

A

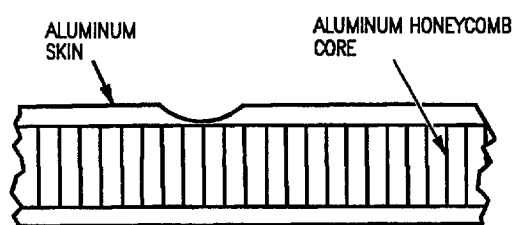
Figure 3. Negligible Damage



VOID OR UNBOND
CLASS I DAMAGE

A

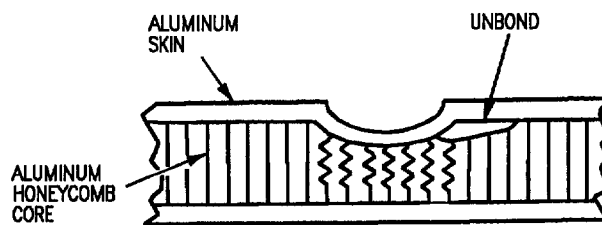
Figure 4. Repairable Damage (Sheet 1)



DENT IN SKIN WITHOUT CRUSHED CORE

CLASS II DAMAGE

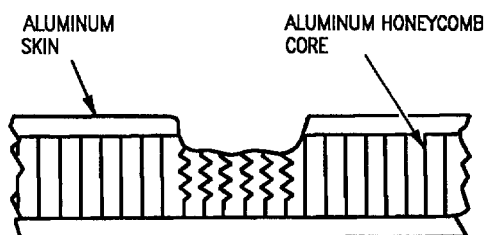
B



DENT IN SKIN WITH CRUSHED CORE OR UNBOND

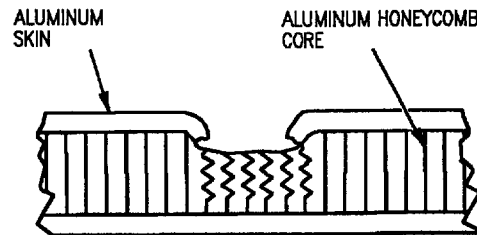
CLASS III DAMAGE

C

BULGE, DENT, CRACK, OR PUNCTURE IN
ONE SKIN, CORE DAMAGED

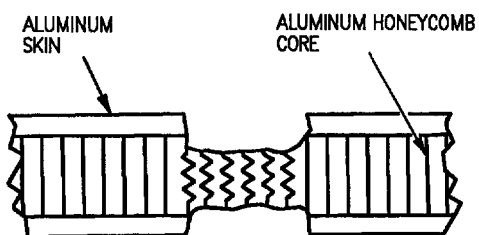
CLASS V DAMAGE

G

BULGE, SHARP DENT, CRACK, OR PUNCTURE
IN ONE SKIN, CORE DAMAGED

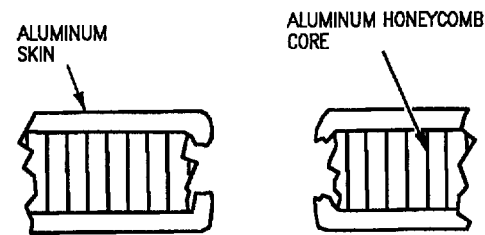
CLASS IV DAMAGE

D

BOTH SKINS CRACKED OR PUNCTURED,
BULGED, SHARPLY DENTED, CORE DAMAGED

CLASS VI DAMAGE

F

BOTH SKINS CRACKED, PUNCTURED, BULGED
OR DENTED, CORE DAMAGED

CLASS VII DAMAGE

E

Figure 4. Repairable Damage (Sheet 2)

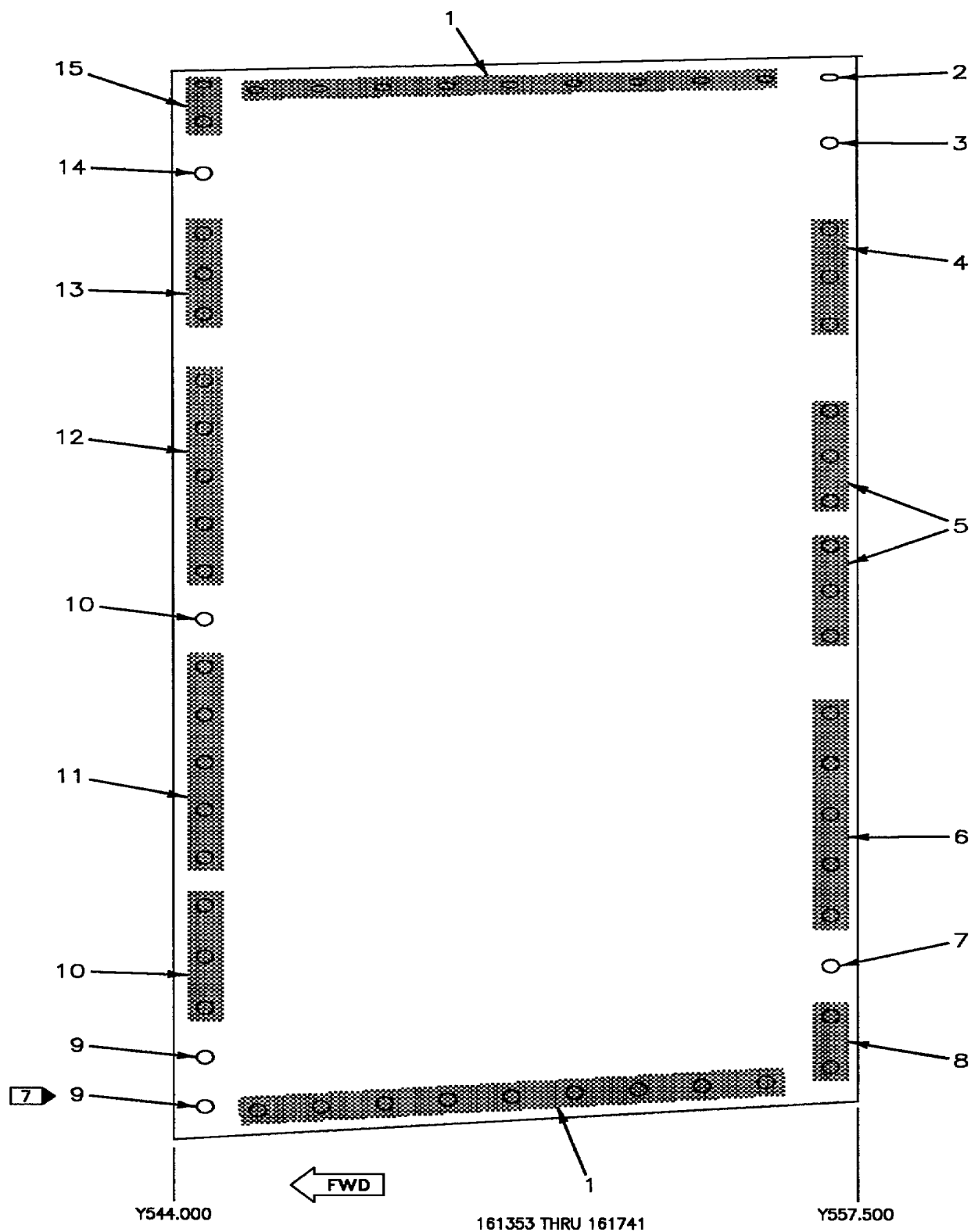
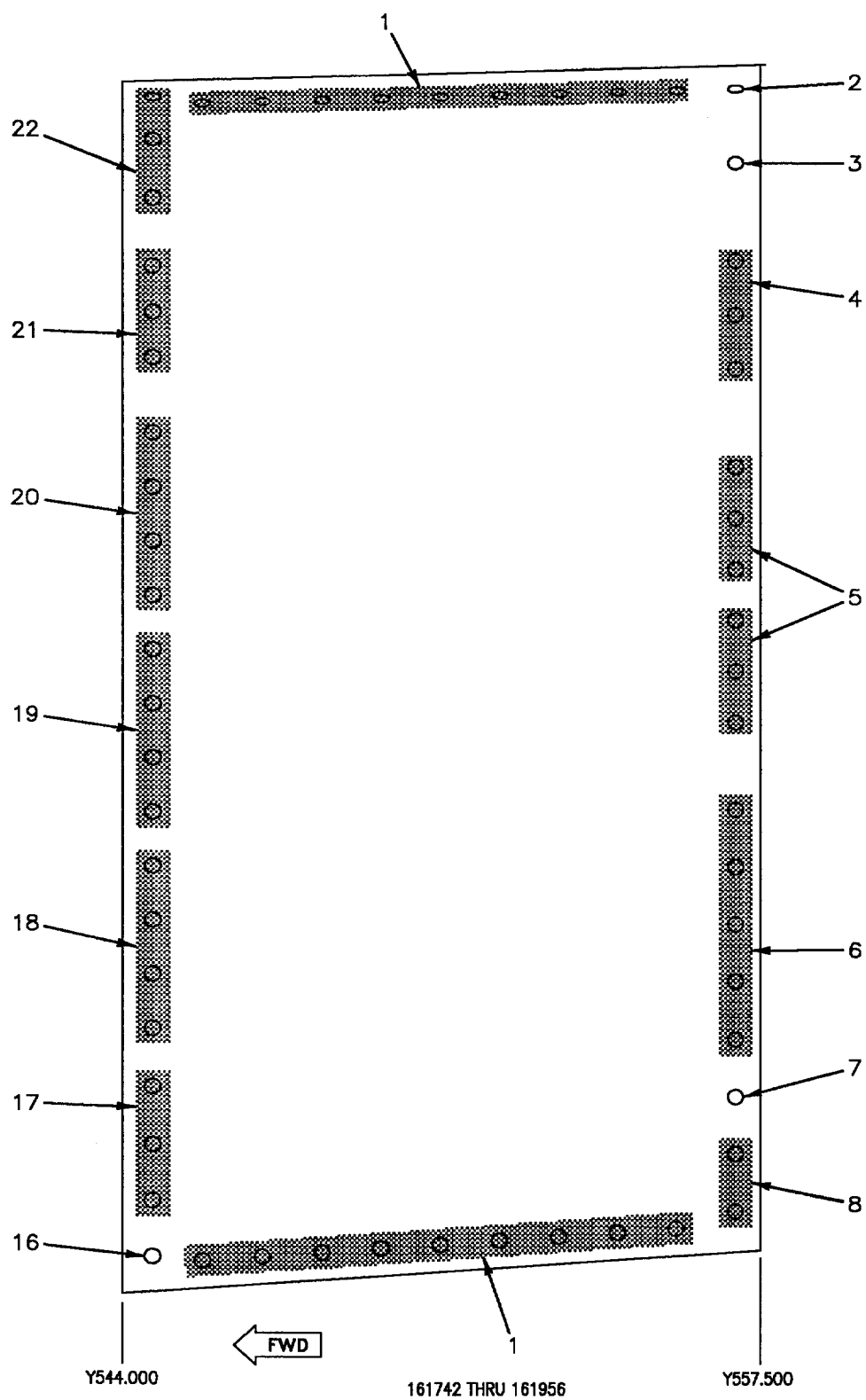
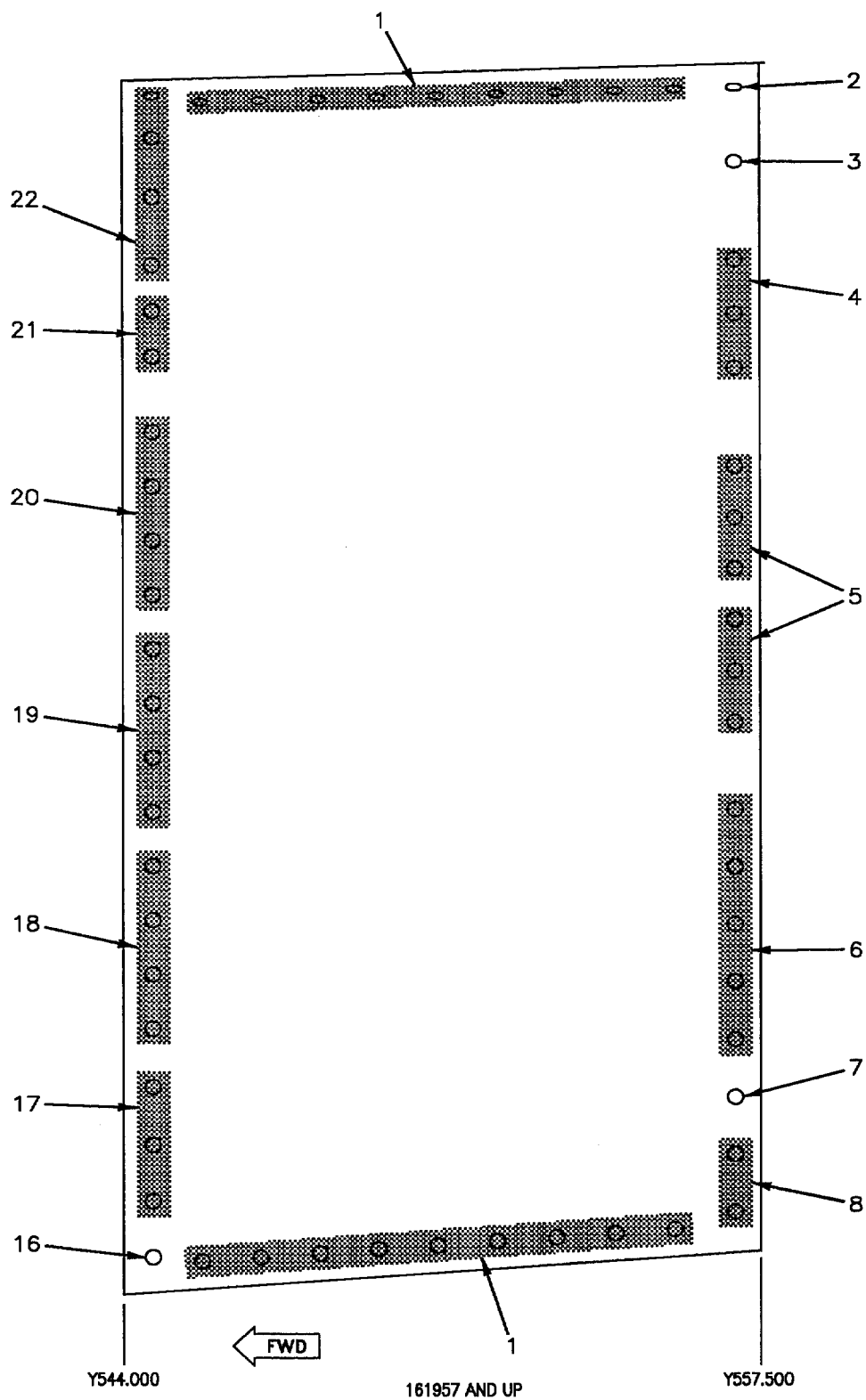


Figure 5. Door 55 Replacement (Sheet 1)



02800502

Figure 5. Door 55 Replacement (Sheet 2)



02800503

Figure 5. Door 55 Replacement (Sheet 3)












































Idx No.	Eft		Nomenclature	Part Number
1			Gang Channel	G14421-4-4-10-9
2	  		 Plate Nut  Shim  Plate Nut	MS21075L4 NAS1195D4WH F50403-4-1
3	 		Plate Nut Plate Nut	MS21075L4 F50403-4-1
4			Gang Channel	G14421-4-4-10-3
5			Gang Channel	G14421-4-4-9-3
6			Gang Channel	74A324628-2011
7			 Gang Channel Filler	74A324628-2003 74A324628-2001, -2002
8			 Gang Channel	74A324628-2003
9			Plate Nut Shim	MS21075L4 NAS1195D4WH
10			Plate Nut  Shim	MS21075L4 NAS1195D4WH
11			Gang Channel	74A324628-2009
12			Gang Channel	G14421-4-4-10-5
13			Gang Channel	74A324628-2007
14			Plate Nut	F49249E4-1
15			 Plate Nut	MS21075L4
16			 Plate Nut	F50403-4-2
17			Gang Channel	74A324628-2035
18			Gang Channel	74A324628-2037
19	 		Gang Channel Gang Channel	G14421-4-4-9-4 G18421JL9-4-4
20			Gang Channel	74A324628-2039
21	 	 	Gang Channel Nut Assy	G14421-6-4F11-2 74A324628-2031

Figure 5. Door 55 Replacement (Sheet 4)

Idx No.	Eft		Nomenclature	Part Number
22	<div>8</div> <div>12</div> <div>9</div>	<div>1</div> <div>1</div> <div>1</div>	<div>5</div> Nut Assy <div>11</div> Nut Assy <div>5</div> Nut Assy	74A324628-2041, -2042 74A324628-2045, -2046 74A324628-2053, -2054
<p style="text-align: center;">LEGEND</p> <div>1</div> Hole diameter is 0.250 +0.006 -0.000. <div>2</div> Four required. <div>3</div> Two required. <div>4</div> 161742 AND UP. <div>5</div> Made from MS21075L4 plate nut. <div>6</div> 161353 THRU 161741. <div>7</div> Attached with RV1241-3 rivet. Determine length on installation. <div>8</div> 161742 THRU 161934. <div>9</div> 161935 THRU 161956. <div>10</div> 161742 THRU 161956. <div>11</div> Made from F49249E4-1 plate nut. <div>12</div> 161957 AND UP. <div>13</div> 162445 THRU 163155. <div>14</div> 161742 THRU 162444, 163156 AND UP.				

Figure 5. Door 55 Replacement (Sheet 5)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE ALUMINUM AND TITANIUM COVERS AND DOORS, Y453.000 THROUGH
Y518.000, DAMAGE EVALUATION AND REPAIRS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Aft Center Fuselage Finish System and Markings	WP033 00
Fuel System	A1-F18AC-460-300
Fuel Tank Cavity Preparation	WP039 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Structure Repair, General Information	A1-F18AC-SRM-200
Introduction	WP002 00
EMI Electrical Bonding Strip Contact Verification	WP004 25
Adhesive, Cement, and Sealant; Preparation and Application	WP011 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Aluminum Patch Fabrication	WP006 01
Aluminum, Graphite Epoxy, or Titanium Patch Installation and Removal	WP007 00
Aluminum Sheet, Free of Structure and Land Areas	WP031 00
Titanium Sheet, Free of Structure and Land Areas	WP032 00
Aluminum and Titanium Sheet, Formed Structure	WP033 00
Aluminum Sheet Edge Repairs	WP034 00
Titanium Sheet Edge Repairs	WP035 00
Aluminum Sheet Repairs Across Structure and Lands	WP036 00
Titanium Sheet Repairs Across Structure and Lands	WP037 00
Blending	WP038 00
Aircraft Weapons Systems Cleaning and Corrosion Control	NAVAIR 01-1A-509

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Permanent Repairs	3
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Replacement	5
Door 41, EMI Strips Replacement	5

Record of Applicable Technical Directives

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Types of materials used are shown on figure 1. Repair zones are shown on figure 2. Allowable damage limits within repair zones are listed in tables 1 and 2. Damage not listed or exceeding following limits require depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches (NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

a. Scratches are not allowed within one diameter from edge of any hole.

b. Smooth dents only, effective diameter at least 20 times depth.

4. **REPAIRABLE DAMAGE.** Types and limits of damage are listed below and in table 2. Figure and index numbers in table 2 coincide with figure and index numbers in material index.

NOTE

Limits in table 2 apply after blending damage.

a. Scratches.

(1) Any scratches within one diameter of any hole may be blended out. Minimum blend out is one diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.

c. Cracks. All cracks must be repaired.

d. Holes.

(1) Damage in areas free of structure and lands must have edge of cleanup hole at least eight repair fastener diameters from any land, internal structure, or existing row of fasteners.

(2) Damage to lands over structure, only one repair per land.

e. Dents exceeding limits in table 1 must be repaired.



Make sure all sharp edges have been removed from fuel tank cavities after repair (A1-F18AC-460-300, WP039 00). Sharp edges can cause damage to fuel tanks.

5. REPAIRS.

6. Types of repairs are temporary, one-time flight, permanent, critical area, alternate, and typical. Repair type definitions are in structure repair terms (A1-F18AC-SRM-200, WP002 00).

7. PERMANENT REPAIRS.

8. **Scratches, Nicks, Gouges, or Corrosion.** Blend scratches, nicks, gouges, or corrosion (A1-F18AC-SRM-250, WP038 00). If, after blending, damage limits of table 2 are exceeded, repair aluminum sheet or titanium sheet as below. Refinish blended areas (A1-F18AC-SRM-500, WP033 00).

a. Scratches - make crack or edge repair.

b. Nicks, gouges, or corrosion - make hole or edge repair.

9. Cracks.

a. In repair zone A2, repair cracks free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Stop drill ends of cracks.

(2) In repair zone A2, install lap patch for cracks.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair cracks free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut-out crack in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zone A2, repair cracks across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below:

(1) Cut out damage.

(2) In repair zone A2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Land; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zone A2, repair cracks to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below.

(1) Cut out damage.

(2) In repair zone A2, install repair one through six. Select repair that can be adapted to damaged part.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

10. Holes.

a. In repair zone A2, repair holes free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Cut out damage.

(2) In repair zone A2, install type one flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair holes free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut-out damage in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zone A2, repair holes across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below:

(1) Cut out damage.

(2) In repair zone A2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Lands; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zone A2, repair holes to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below:

(1) Cut out damage.

(2) In repair zone A2, install repair one through six. Select repair that can be adapted to damaged part.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

11. **Edge.** In repair zone A2, repair edge damage in aluminum sheet (A1-F18AC-SRM-250, WP034 00) or in titanium sheet (A1-F18AC-SRM-250, WP035 00) as below:

a. Cut out damage.

b. Select and install repair patch as below:

(1) Corner Damage to Lands.

(2) Corner Damage to Lands and Bays.

(3) Edge Damage to Lands.

(4) Edge Damage to Lands and Bays.

(5) Full Width Damage to End.

c. Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

12. Dents.

a. In repair zone A2, repair dents free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Cut out damage.

(2) In repair zone A2, install type one flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair dents free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut-out damage in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zone A2, repair dents across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below:

(1) Cut out damage.

(2) In repair zone A2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Lands; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zone A2, repair dents to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below:

(1) Cut out damage.

(2) In repair zone A2, install repair one through six. Select repair that can be adapted to damaged part.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

13. REPLACEMENT.

14. DOOR 41, EMI STRIPS REPLACEMENT. See figure 3. Strips are replaceable.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
Contact Strip, Electrical Bonding	ST9M622-2
Contact Strip, Electrical Bonding	ST9M622-6
Rivet	MS20470AD3
Sealing Compound	MIL-S-8802, Class B1
Sealing Compound	MIL-S-83430 Class B2

a. Remove door 41, (A1-F18AC-LMM-010).



Be careful not to enlarge holes when drilling out rivets, damage to door may occur.

b. Drill out rivets attaching damaged EMI strip(s) to door.

c. Remove damaged EMI strip(s).

d. Prepare surface for electrical bonding (A1-F18AC-LMM-000).

e. Cut new EMI strip(s) to size, from stock.

f. Position new strip(s) on door.



Be careful when making holes in EMI strip(s), damage to door may occur.

g. Make holes in EMI strip(s) for rivets.



Sealing Compound

6

h. Electrical seal EMI strip(s) with MIL-S-8802 sealing compound (A1-F18AC-LMM-000).



Sealing Compound

7



Do not vibration drive rivets; damage to door may occur.

i. Prepare MIL-S-83430 sealing compound, (A1-F18AC-SRM-200, WP011 00).

NOTE

Length of rivets to be determined on installation.

j. Install rivets wet with MIL-S-83430 sealing compound, manufactured head against the EMI strip and micro-shave formed end flush to mold line contour.

k. Install door 41 (A1-F18AC-LMM-010).

l. Verify electrical bonding strip contact A1-F18AC-SRM-200, WP004 25).

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (1)	Door 48	0.040	0.0006	0.0006	100%	0.020	NA
	Zone B3 Zone B3	0.090	0.0006	0.0006	100%	0.045	NA
Fig 1 (2)	Door 57	0.040	0.0006	0.0006	100%	0.020	NA
	Zone B3 Zone B3	0.090	0.0006	0.0006	100%	0.045	NA

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (4)	Door 44 Zone B3 Zone B3	0.030 0.090	0.0006 0.0006	0.0006 0.0006	100% 100%	0.015 0.045	NA NA
Fig 1 (11)	Door 46 Skin Zone B3	0.090	0.0006	0.0006	100%	0.045	NA
(7)	Pin Zone B3	0.089	0.0006	0.0006	100%	NA	NA
(8)	Hinge Zone B3	0.090	0.0006	0.0006	100%	0.045	5%
(9)	Hinge Zone B3	0.090	0.0006	0.0006	100%	0.045	NA
(10)	Stiffener Zone B3	0.125	0.0006	0.0006	100%	0.062	5%
(12)	Bracket Zone B3	0.090	0.0006	0.0006	100%	0.045	10%
Fig 1 (16)	Door 121 Skin Zone B3	0.063	0.0006	0.0006	100%	0.032	0
(13)	Hinge Zone B3	0.063	0.0006	0.0006	100%	0.032	0
(14)	Pin Zone B3	0.089	0.0006	0.0006	100%	NA	NA
(15)	Hinge Zone B3	0.063	0.0006	0.0006	100%	0.032	0
Fig 1 (23)	Door 45 Skin Zone B3	0.055 0.090	0.0006 0.0006	0.0006 0.0006	100% 100%	0.025 0.045	NA NA
(20)	Zone B3 Hinge	0.090	0.0006	0.0006	100%	0.045	10%
(21)	Zone B3 Hinge	0.090	0.0006	0.0006	100%	0.045	NA
Fig 1 (22)	Bracket Zone B3	0.090	0.0006	0.0006	100%	0.045	10%
(24)	Doubler Zone B3	0.090	0.0006	0.0006	100%	0.045	10%
(25)	Pin Zone B3	0.089	0.0006	0.0006	100%	NA	NA

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (26)	Door 41	0.040	0.0006	0.0006	100%	0.020	NA
	Zone B3	0.080	0.0006	0.0006	100%	0.040	NA
	Strip						
(27)	Zone A1	0.005	0.001	0.001	100%	0.003	10%
(28)	Zone A1	0.005	0.001	0.001	100%	0.003	10%
(29)	Zone A1	0.080	0.002	0.002	100%	0.040	10%
(30)	Zone A1	0.005	0.001	0.001	100%	0.003	10%
Fig 1 (31)	Door 42						
	Skin						
	Zone A2	0.047	0.009	0.002	100%	0.024	NA
	Zone A2	0.090	0.018	0.002	100%	0.045	NA
(32)-(33)	Intercostal						
	Zone A2	0.063	0.013	0.002	100%	0.032	15%
Fig 1 (38)	Door 47						
	Skin						
	Zone A2	0.020	0.004	0.002	100%	0.010	NA
	Zone A2	0.090	0.018	0.002	100%	0.045	NA
(34)	Filler						
	Zone A2	0.070	0.014	0.002	100%	0.032	15%
(35)-(37)	Intercostal						
	Zone A2	0.063	0.013	0.002	100%	0.032	15%

Table 2. Repairable Damage Limits After Blending

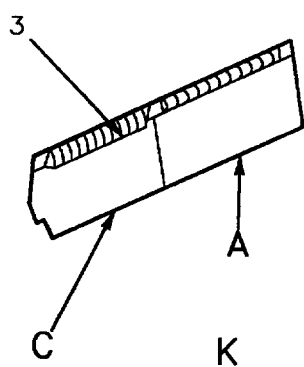
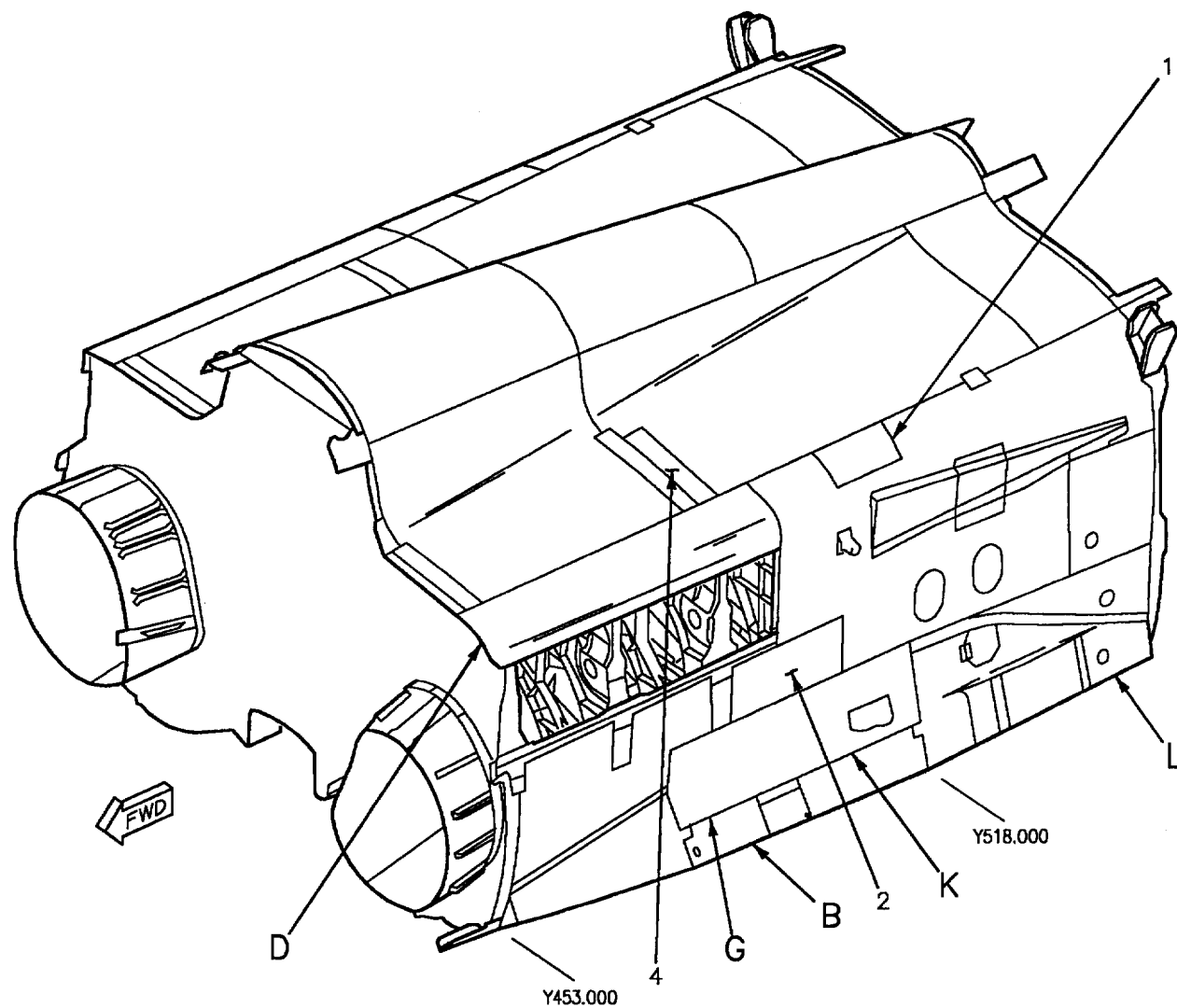
Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (1)	Door 48	0.040	0.008	0.008	30%	0.008	30%
	Zone B3	0.090	0.018	0.018	30%	0.018	30%
Fig 1 (2)	Door 57	0.040	0.008	0.008	15%	0.008	15%
	Zone B3	0.090	0.018	0.018	15%	0.018	15%
Fig 1 (4)	Door 44	0.030	0.006	0.006	15%	0.006	15%
	Zone B3	0.090	0.018	0.018	15%	0.018	15%

Table 2. Repairable Damage Limits After Blending (Continued)

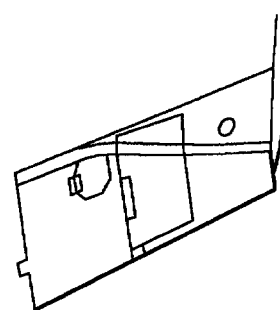
Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (11)	Door 46 Skin	0.090	0.018	0.018	20%	0.018	20%
(7)	Zone B3 Pin	0.089	NA	NA	NA	NA	NA
(8)	Zone B3 Hinge	0.090	0.018	0.018	20%	0.018	20%
(9)	Zone B3 Hinge	0.090	0.018	0.018	20%	0.018	20%
(10)	Zone B3 Stiffener	0.125	0.025	0.025	20%	0.025	20%
(12)	Zone B3 Bracket	0.090	0.018	0.018	20%	0.018	20%
Fig 1 (16)	Door 121 Skin	0.063	0.013	0.013	20%	0.013	20%
(13)	Zone B3 Hinge	0.063	0.013	0.013	20%	0.013	20%
(14)	Zone B3 Pin	0.089	NA	NA	NA	NA	NA
(15)	Zone B3 Hinge	0.063	0.013	0.013	20%	0.013	20%
Fig 1 (23)	Door 45 Skin	0.055	0.010	0.010	20%	0.010	20%
(20)	Zone B3	0.090	0.018	0.018	20%	0.018	20%
(21)	Zone B3 Hinge	0.090	0.018	0.018	20%	0.018	20%
(22)	Zone B3 Hinge	0.090	0.018	0.018	20%	0.018	20%
(24)	Zone B3 Bracket	0.090	0.018	0.018	20%	0.018	20%
(25)	Zone B3 Doubler	0.090	0.018	0.018	20%	0.018	20%
(26)	Zone B3 Pin	0.089	NA	NA	NA	NA	NA
Fig 1 (26)	Door 41 Zone B3	0.040	0.008	0.008	30%	0.008	30%
(27)	Zone B3 Strip	0.080	0.016	0.016	30%	0.016	30%
(28)	Zone A1	0.005	0.001	0.001	100%	0.001	100%
(29)	Zone A1	0.005	0.001	0.001	100%	0.001	100%
(30)	Zone A1	0.080	0.016	0.016	100%	0.016	100%
	Zone A1	0.005	0.001	0.001	100%	0.001	100%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (31) (32)-(33)	Door 42 Skin	0.047	0.009	0.009	20%	0.009	20%
	Zone A2	0.090	0.018	0.018	20%	0.018	20%
	Intercostal Zone A2	0.063	0.013	0.013	20%	0.013	20%
Fig 1 (38) (34) (35)-(37)	Door 47 Skin	0.020	0.004	0.004	40%	0.004	40%
	Zone A2	0.090	0.018	0.018	40%	0.018	40%
	Filler Zone A2	0.070	0.014	0.014	40%	0.014	40%
	Intercostal Zone A2	0.063	0.013	0.013	40%	0.013	40%



161353 THRU 161944



161353 THRU 161704

Figure 1. Material Index (Sheet 1)

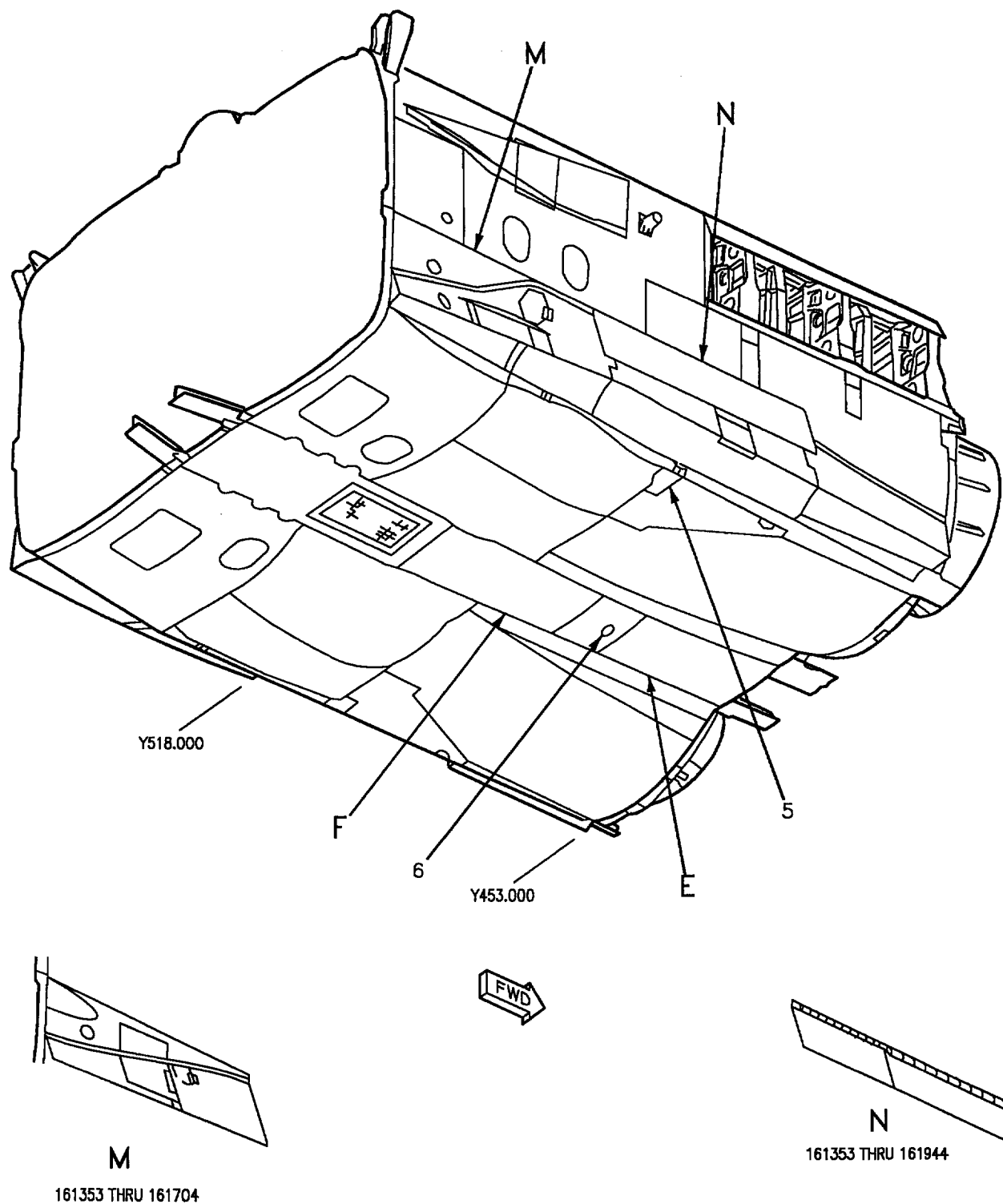


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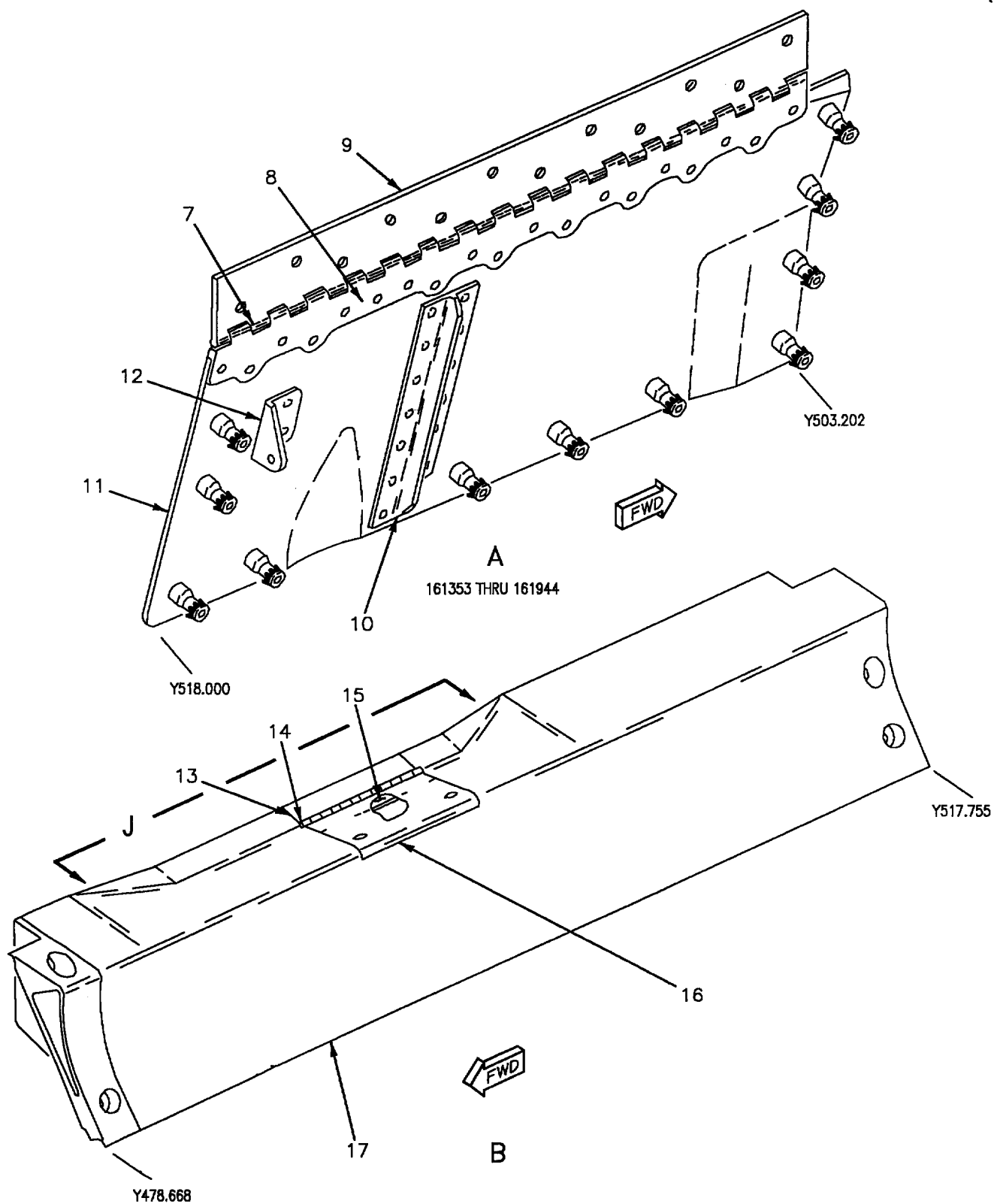


Figure 1. Material Index (Sheet 3)

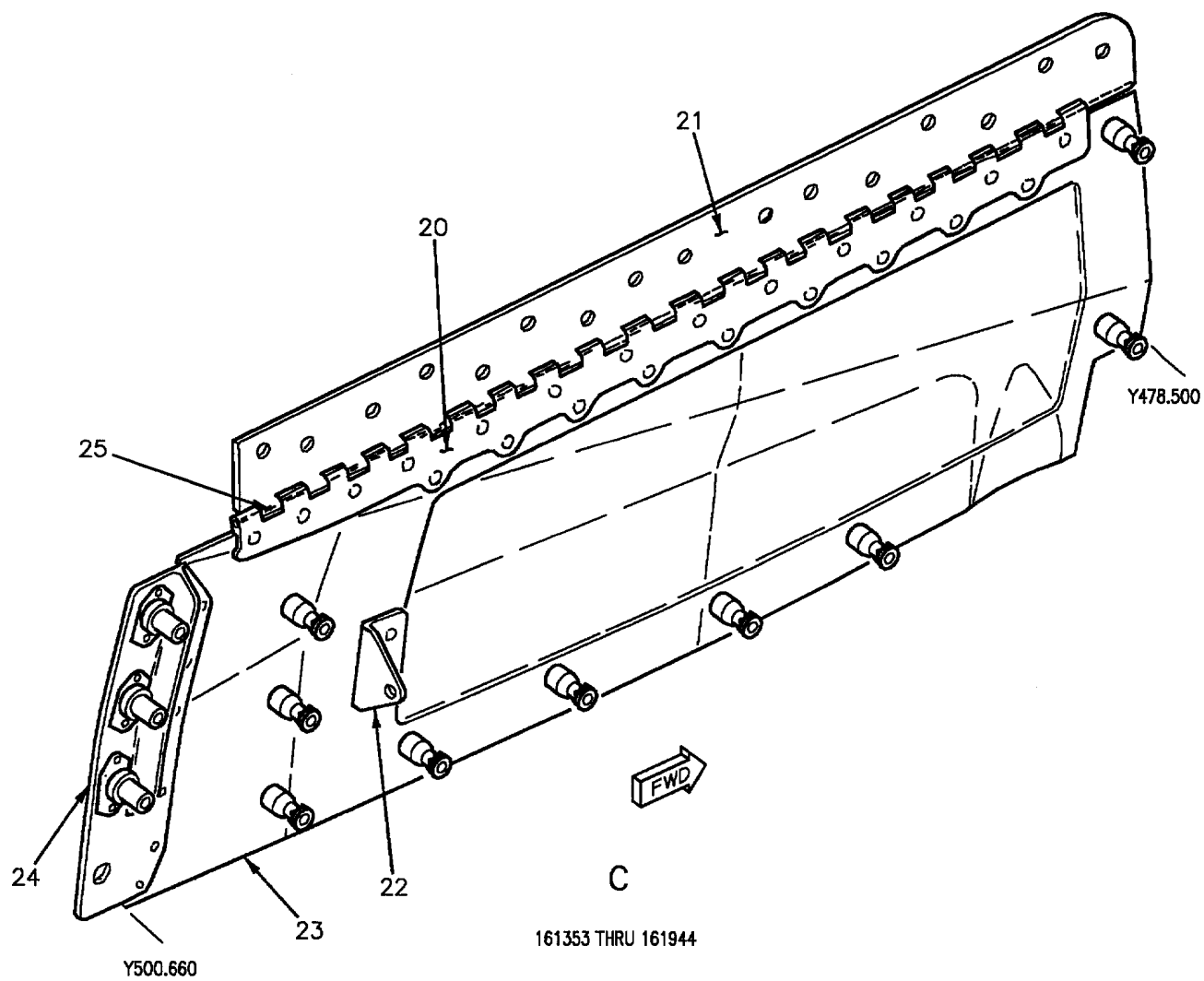


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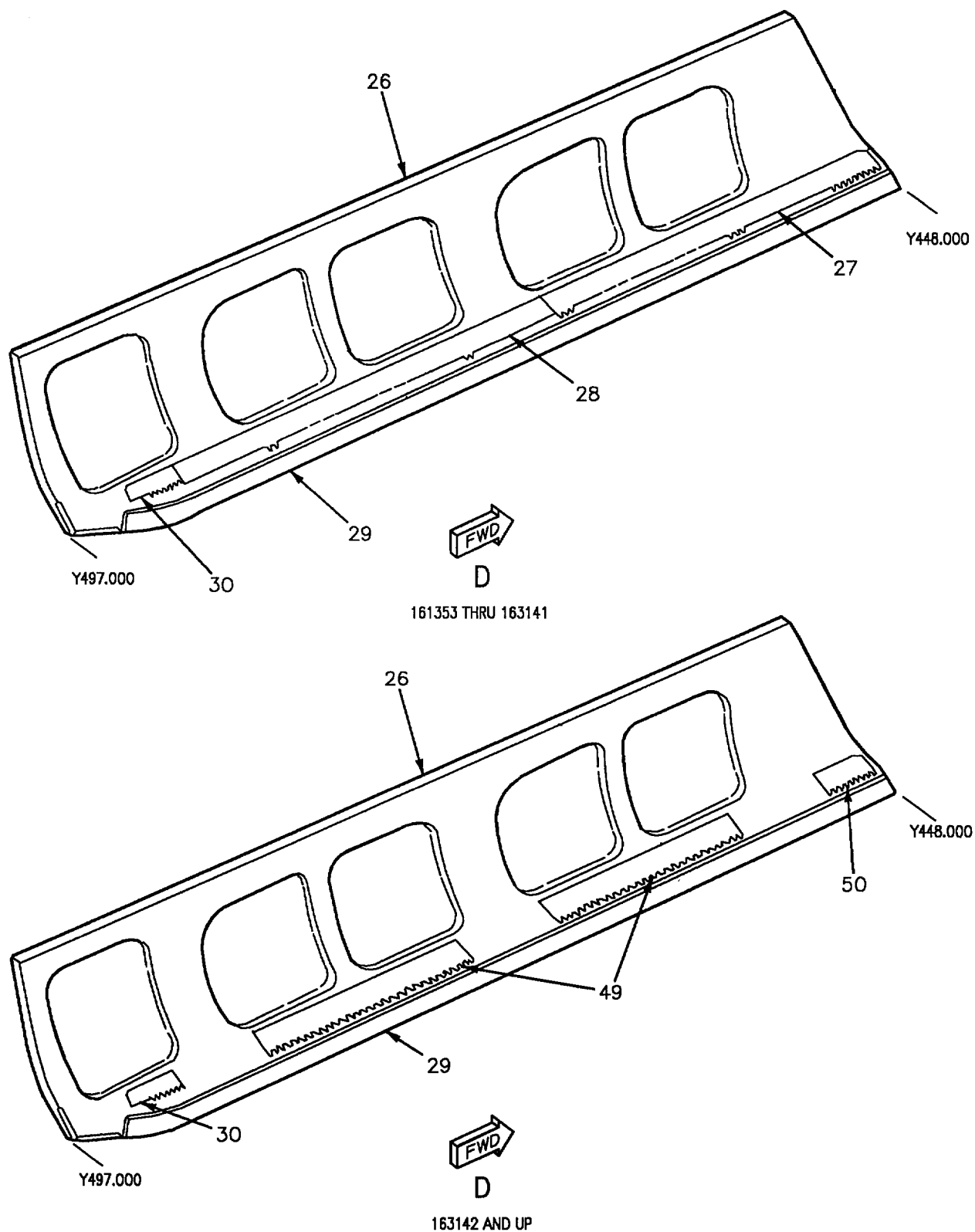


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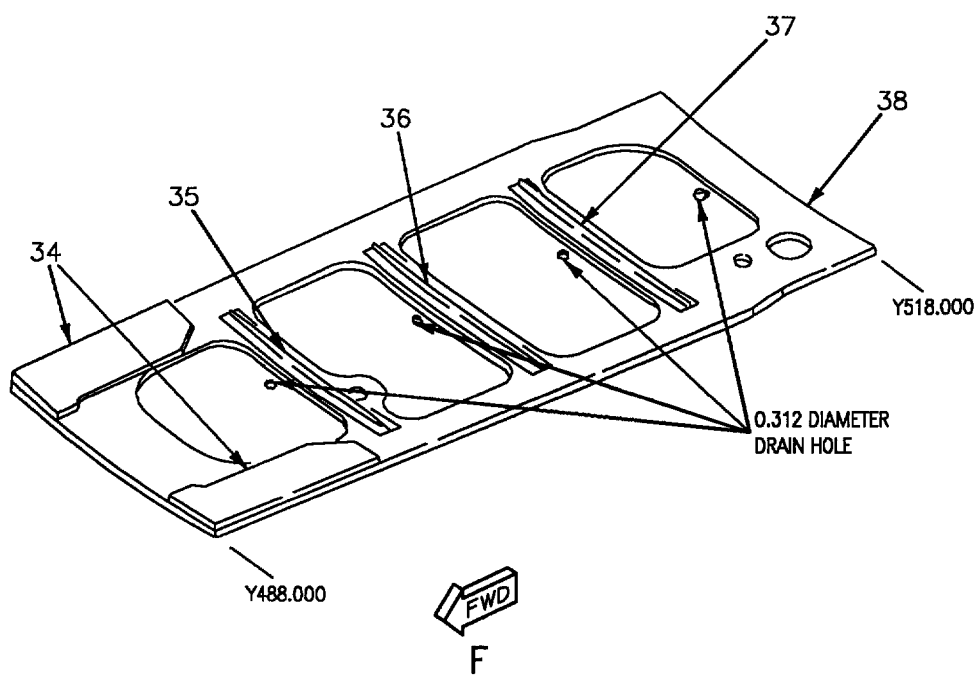
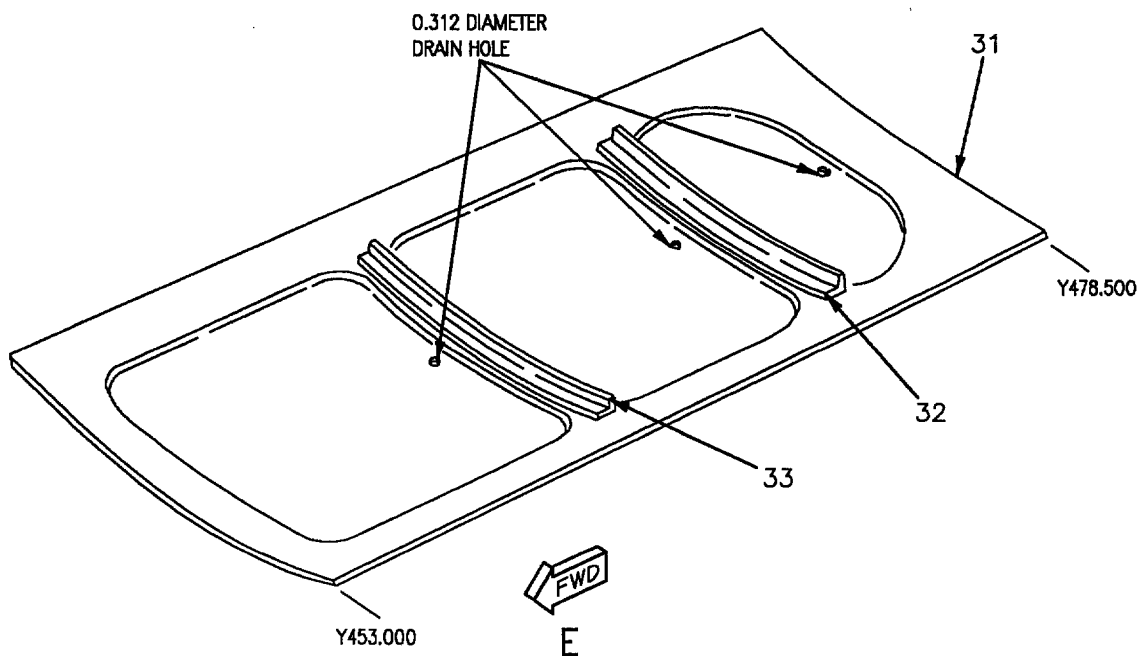


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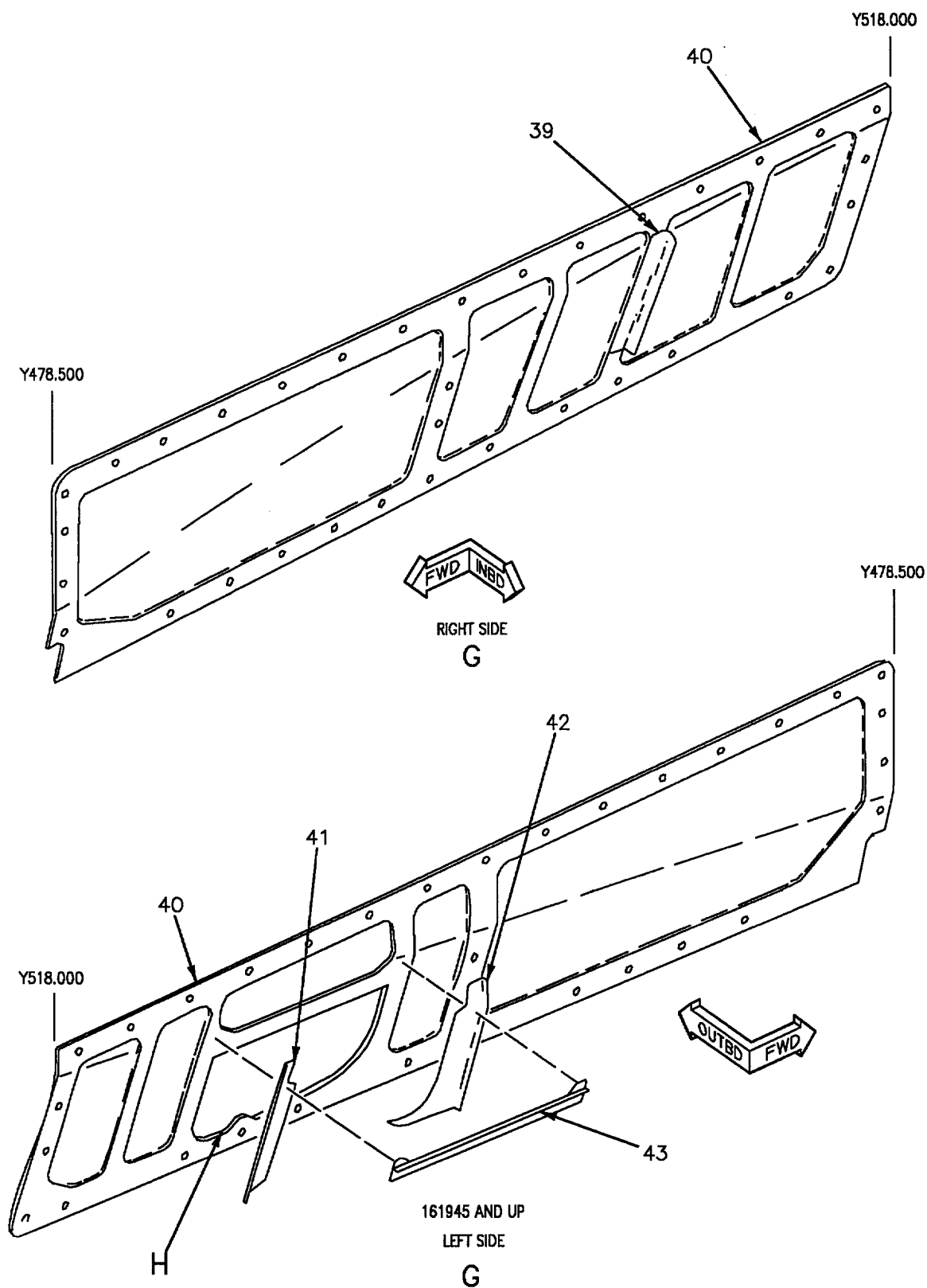


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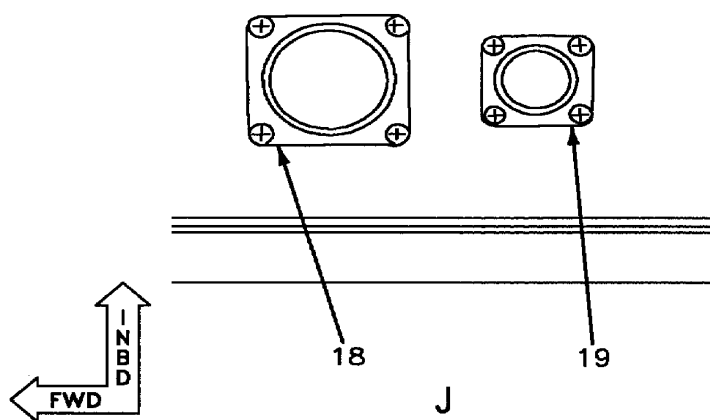
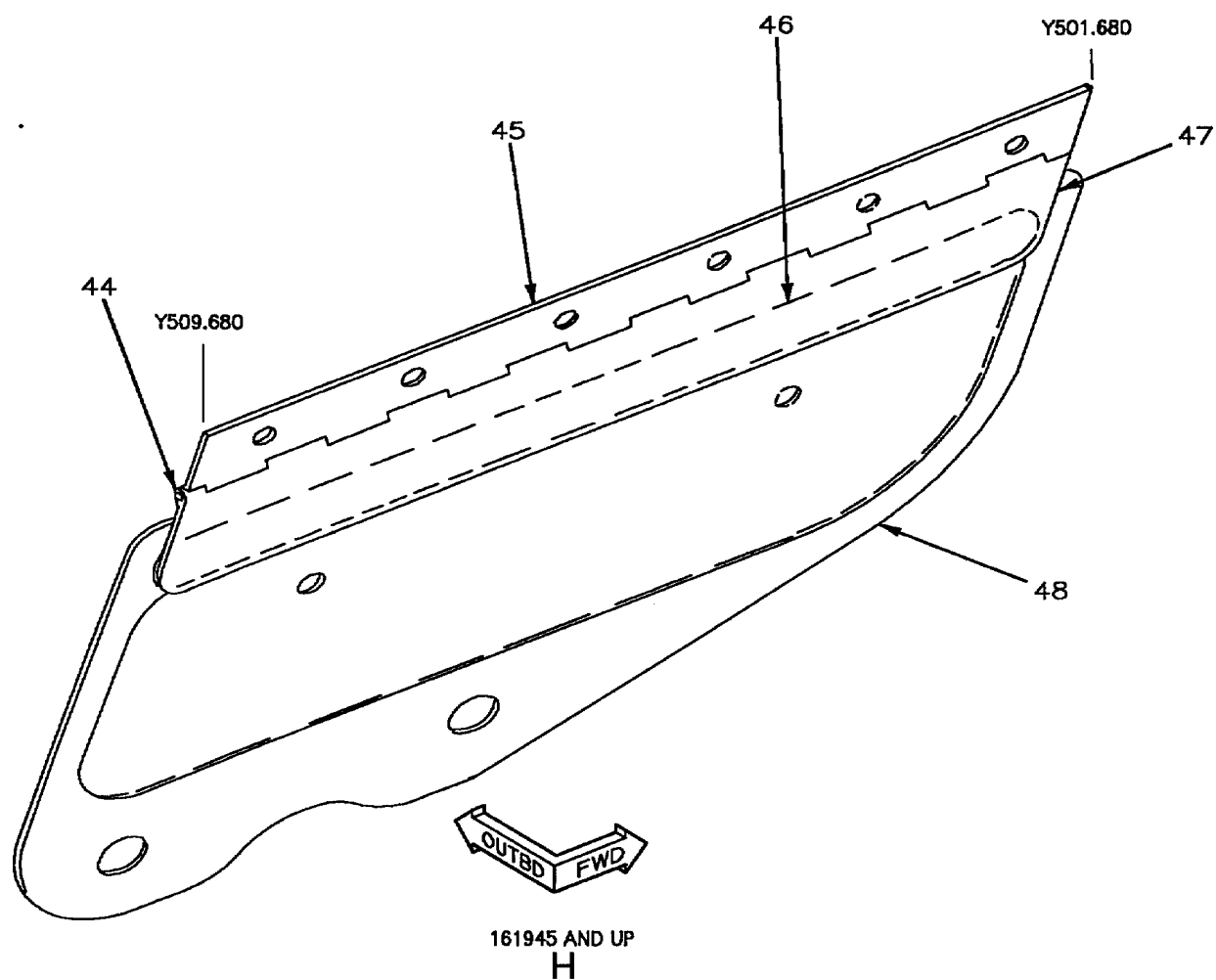


Figure 1. Material Index (Sheet 8)

























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2	  	Cover (Door 57) 74A324602-2003, -2004 74A324602-2005, -2006 74A324602-2009, -2010	 Sheet	7075-T76 Alclad
3		Retainer 74A324722-1001, -1002	0.090 Sheet	7075-T76 Alclad
4	  	Skin (Door 44) 74A324620-2001, -2002 74A324620-9001, -9002 74A324620-2007, -2008	 Sheet	6Al-4V Ti Anl
5	    	Skin 74A324736-1001,-1002 74A324736-2007, -2008 74A324736-9001, -9002 74A324736-2009, -2010 74A324736-2011, -2012	 Fiberite E-260H Fiberite E-260H Fiberite E-260H	Fiberglass Epoxy Laminate Epoxy Molding Comp Epoxy Molding Comp Epoxy Molding Comp
6		Cover 74A324686-2003	0.090 Sheet	7075-T76 Alclad
7		Pin 74A324721-2001	0.089 Wire	302 CRES Cond B
8		Hinge 74A324717-2005, -2006	Pressing	7075-T73 Al Aly
9		Hinge 74A324720-2005, -2006	Pressing	7075-T73 Al Aly
10	 	Stiffener 74A324637-9001, -9002 74A324637-2007, -2008	1MA160D05-10049 Extr	7075-T73511 Al Aly
11		Skin (Door 46) 74A324638-2003, -2004	0.125 Sheet	7075-T76 Alclad
12		Bracket 74A324637-2003, -2004	0.090 Sheet	7075-T76 Alclad
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Figure 1. Material Index (Sheet 9)























Idx No.	Eft	Nomenclature and Part No.	Description	Material
15		Hinge 74A730237-2043	Extruded	2024-T8511 Al Aly
16		Cover (Door 121) 74A730237-2055	0.071 Sheet	7075-T6 Alclad
17		Door 176 74A730237-1001,-1002	0.063 Sheet	7075-T6 Alclad
18		Receptacle 10-427405-239		
19		Receptacle 10-427405-139		
20		Hinge 74A324714-2003, -2004	Pressing	7075-T73 A1 Aly
21		Hinge 74A324719-2003, -2004	Pressing	7075-T73 Al Aly
22		Bracket 74A324633-2003, -2004	0.090 Sheet	7075-T76 Alclad
23		Skin (Door 45) 74A324634-2005, -2006	 Sheet	7075-T76 Alclad
24	 	Doubler 74A324633-2005, -2006 74A324633-2005, -2010	1MA160D01-10374 Extr	7075-T76 Al Aly
25		Pin 74A324721-2003	0.089 Wire	302 CRES Cond B
26	      	Cover (Door 41) 74A324672-9001, -9002 74A324672-1003, -1004 74A324672-1005, -1006 74A324672-1007, -1008 74A324672-1009, -1010 74A324672-1015, -1016 74A324672-1017, -1018	 Sheet	7075-T62 Alclad
27	 	Strip 74A324672-2027, -2028 74A324672-2035, -2036	0.005 Sheet	Beryllium Copper Aly 172 Cond H
28	 	Strip 74A324672-2029, -2030 74A324672-2037, -2038	0.005 Sheet	Beryllium Copper Aly 172 Cond H
29	 	Strip 74A324672-2003, -2004 74A324672-2049, -2050	0.080 Sheet	Teflon

Figure 1. Material Index (Sheet 10)






















Idx No.	Eft	Nomenclature and Part No.	Description	Material
30	 	Strip 74A324672-2031, -2032 74A324672-2039, -2040	0.005 Sheet	Beryllium Copper Aly 172 Cond H
31		Skin (Door 42) 74A324641-2009	 Sheet	7075-T76 Alclad
32		Intercostal 74A324641-2013	1MA100001-10002 Extr	7075-T76 Al Aly
33		Intercostal 74A324641-2011	1MA100001-10002 Extr	7075-T76 Al Aly
34		Filler 74A324645-2005, -2006	0.070 Sheet	6Al-4V Ti Anl
35		Intercostal 74A324645-2009	1MA160D01-10012 Extr	7075-T76 Al Aly
36		Intercostal 74A324645-2003	1MA160D01-10012 Extr	7075-T76 Al Aly
37		Intercostal 74A324645-2007	1MA160D01-10012 Extr	7075-T76 Al Aly
38		Skin (Door 47) 74A324645-2001	 Sheet	6Al-4V Ti Anl
39		Stiffener 74A324608-2011	0.063 Sheet	7075-T62 Alclad
40		Door 45 74A324607-2001, -2002	 Sheet	7075-T76 Alclad
41		Stiffener  74A324608-2003	0.040 Sheet	7075-T6 Alclad
42		Stiffener  74A324608-2005	0.040 Sheet	7075-T62 Alclad
43		Bracket  74A324545-2059	Extrusion	7075-T76511 Al Aly
44		Pin  MS20253P2-740	0.089 Wire	CRES Cond. B
45		Hinge  74A324608-2007	Extruded	7075-T73511 Al Aly
46		Filler  74A324545-2063	0.050 Sheet	7075-T6 Alclad
47		Hinge  74A324608-2001	Extruded	7075-T73511 Al Aly

Figure 1. Material Index (Sheet 11)













































Idx No.	Eft	Nomenclature and Part No.	Description	Material
48		Door 46  74A324607-2003	 Sheet	7075-T62 Alclad
49 L/H L/H	 	Strip 74A324672-2057 74A324672-2061	0.005 Sheet	Beryllium Copper Aly 172 Cond H
50 L/H L/H	 	Strip 74A324672-2055 74A324672-2059	0.005 Sheet	Beryllium Copper Aly 172 Cond H
LEGEND				
 Land is 0.090 and bays are 0.040.  Land is 0.090 and bays are 0.030.  Land is 0.090 and bays are 0.055.  Land is 0.080 and bays are 0.040.  Land is 0.090 and bays are 0.047.  Land is 0.090 and bays are 0.020.  161528 THRU 161704.  161353 THRU 161527.  161353 THRU 161363, 161365 THRU 161704.  161364.  161353 THRU 161705, 161707.  161706, 161708 THRU 161944.  161353 THRU 161704.  161705 AND UP.  161353 THRU 161528.  161702 THRU 161944.  161353 THRU 161761.  161924 THRU 163141.  161705 THRU 161761.  161728 AND UP.  161705 THRU 161726.  161353 THRU 161944.  161353 THRU 161360.  161361 THRU 161702.  161703 THRU 161725.  161726 THRU 162414.  161353 THRU 161741.  Made from reinforced plastic style 181 cloth, Type I, Class E, Grade 3.  161945 AND UP.  Land is 0.090 and bays are 0.045.  Land is 0.080 and bay is 0.045.  Left side only.  Right side only.  161353 THRU 162414.  162415 AND UP.  161924 THRU 162477.  162826 THRU 163141.				

Figure 1. Material Index (Sheet 12)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
38		163142 THRU 163171.		
39		163172 AND UP.		
40		161353 THRU 163171.		

Figure 1. Material Index (Sheet 13)

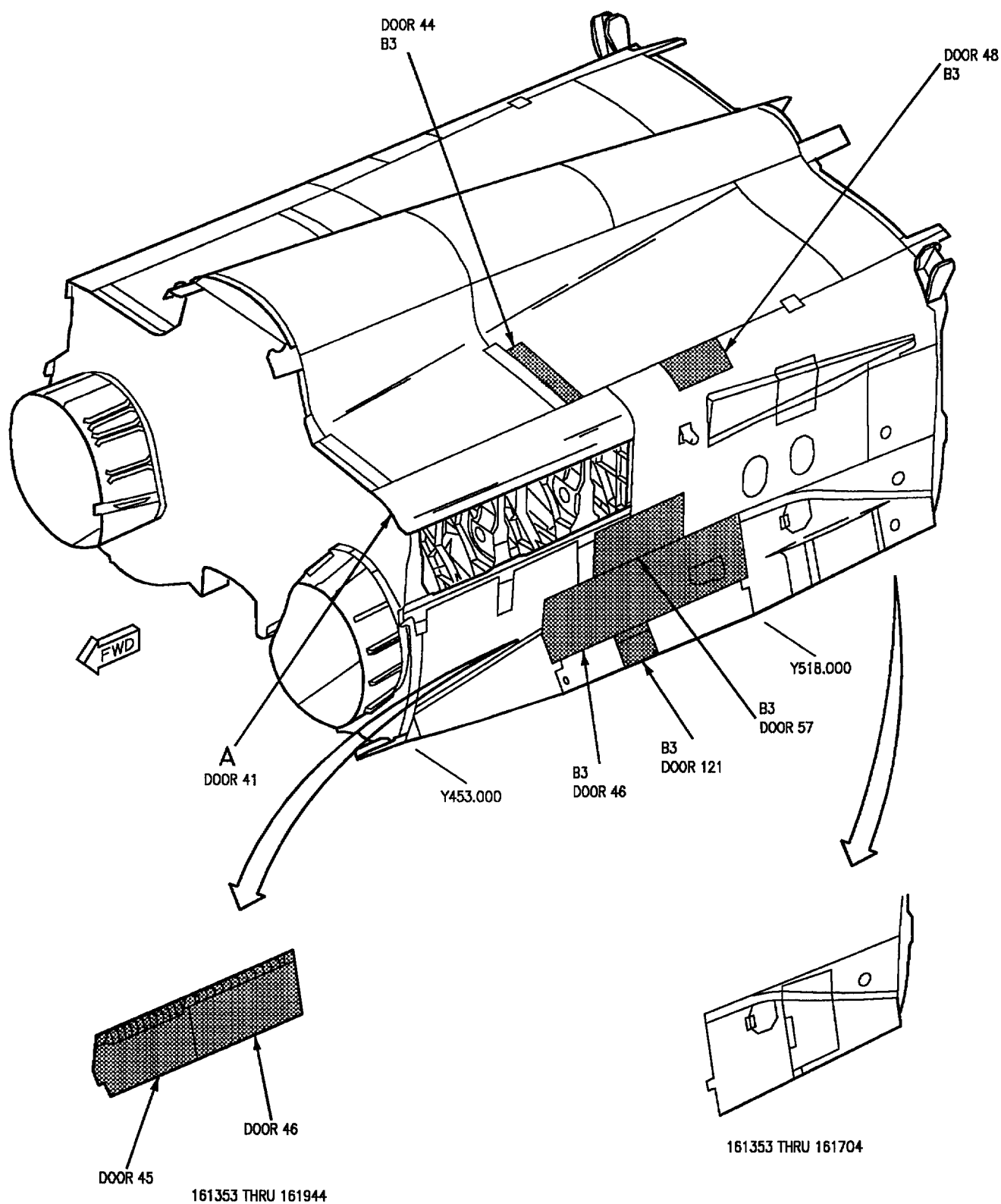


Figure 2. Repair Zone (Sheet 1)

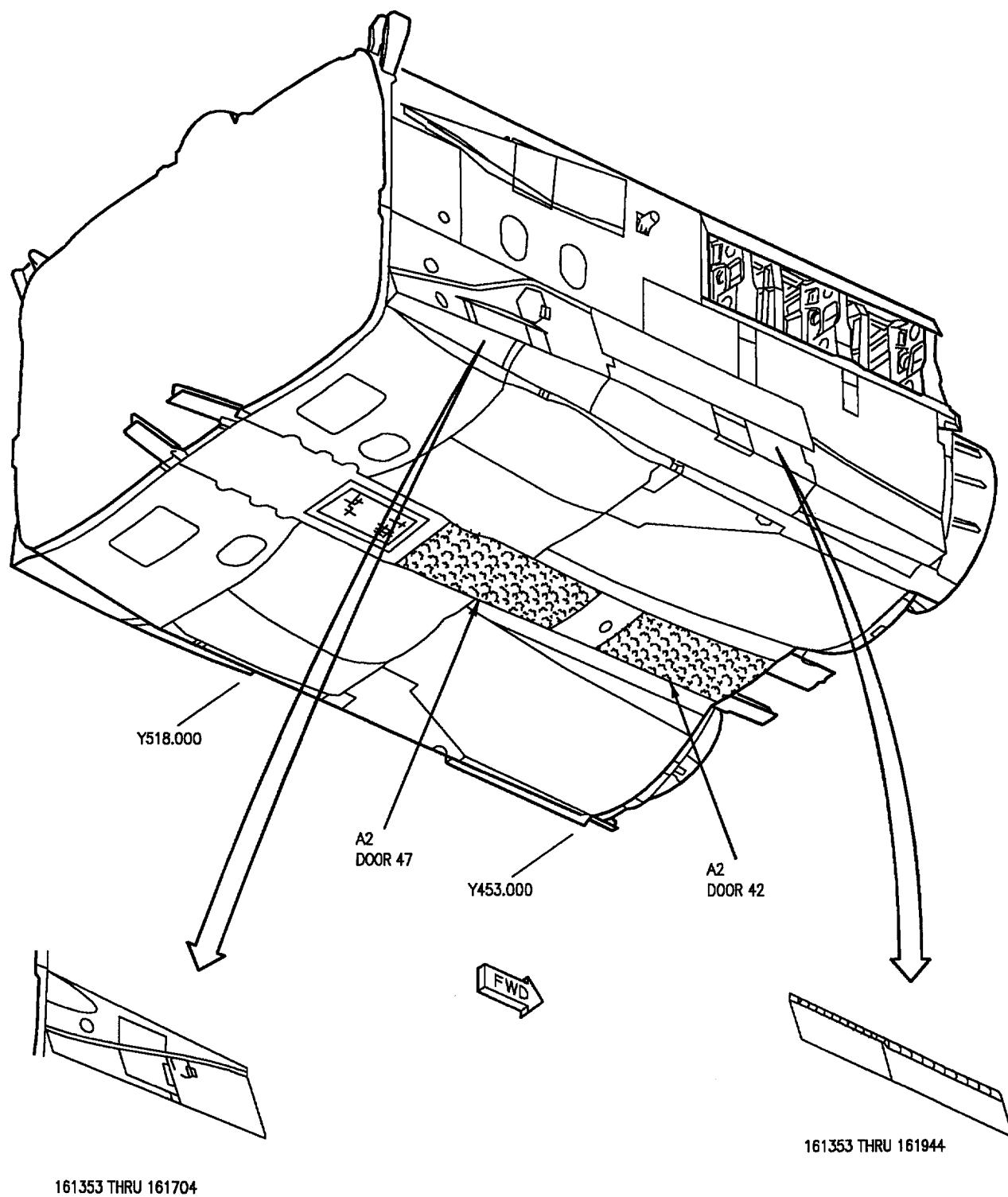


Figure 2. Repair Zone (Sheet 2)

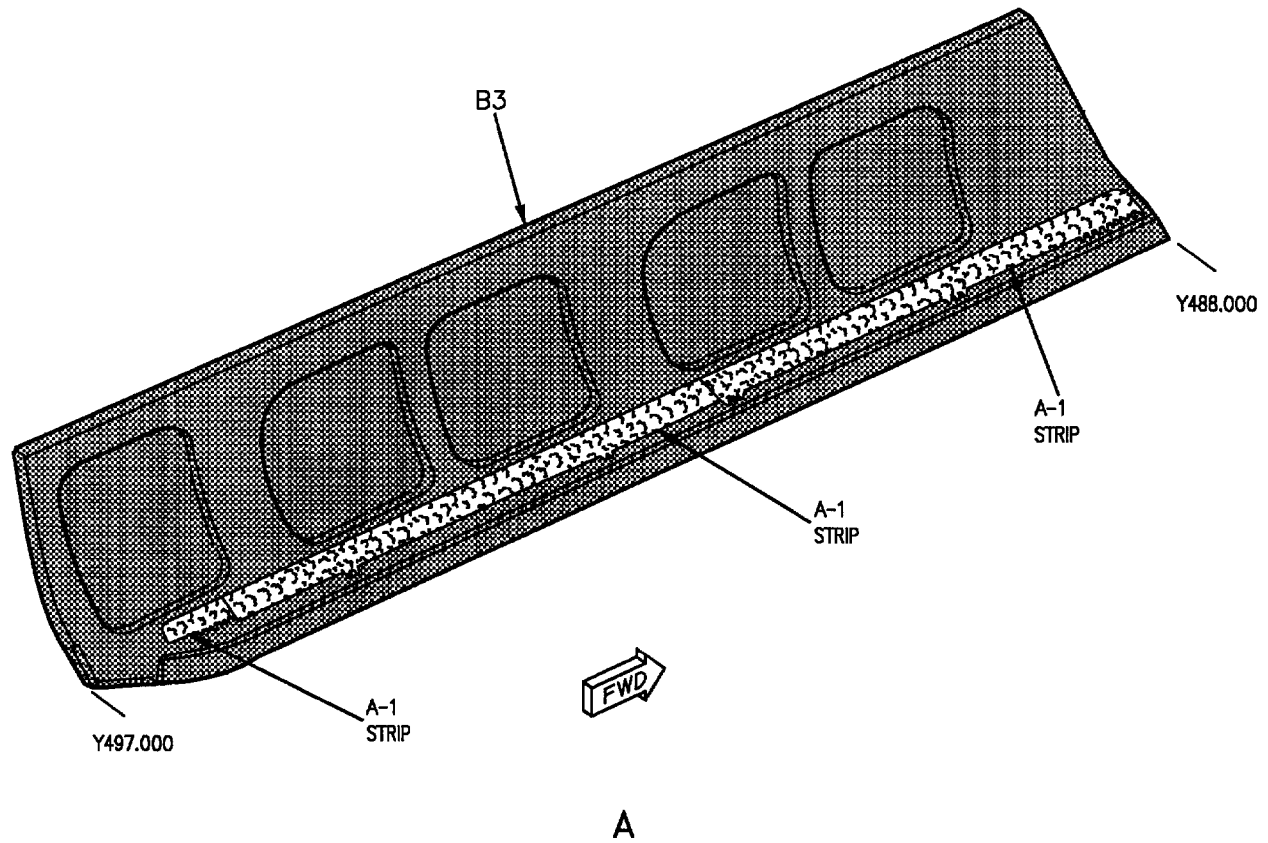
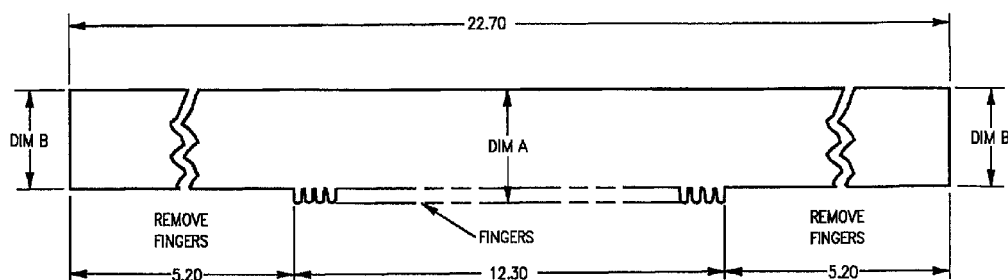
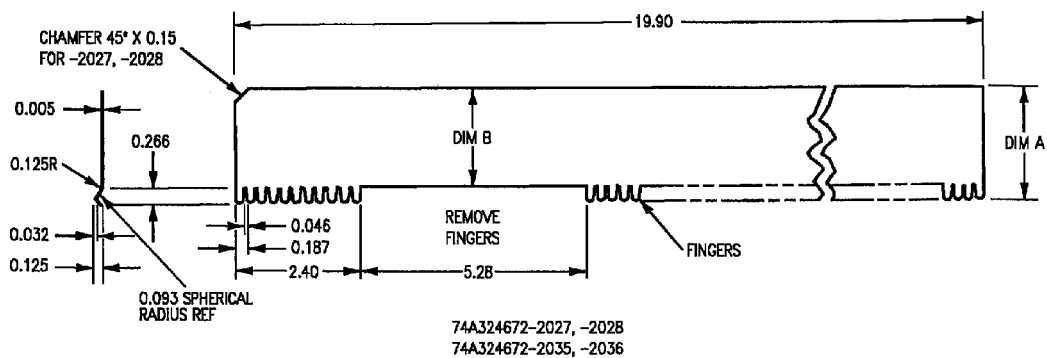


Figure 2. Repair Zone (Sheet 3)



MATERIAL	DASH NO.	DIM A	DIM B
ST9M622-6	-2027 -2028	2.000	1.734
ST9M622-6	-2029 -2030	2.000	1.734
ST9M622-2	-2035 -2036	1.146	0.880
ST9M622-2	-2037 -2038	1.146	0.880

74A324672-2029, -2030
74A324672-2037, -2038

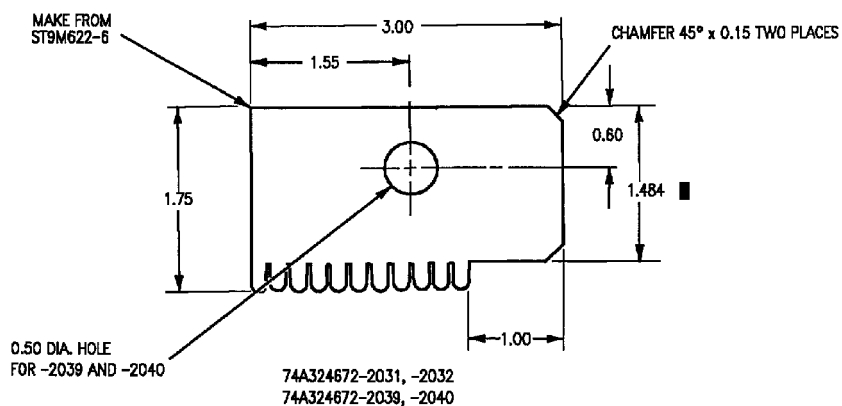
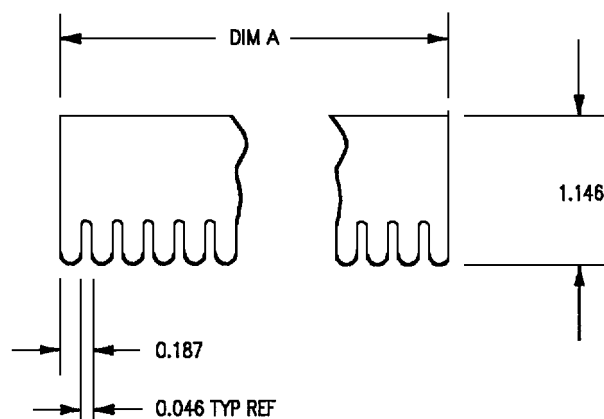
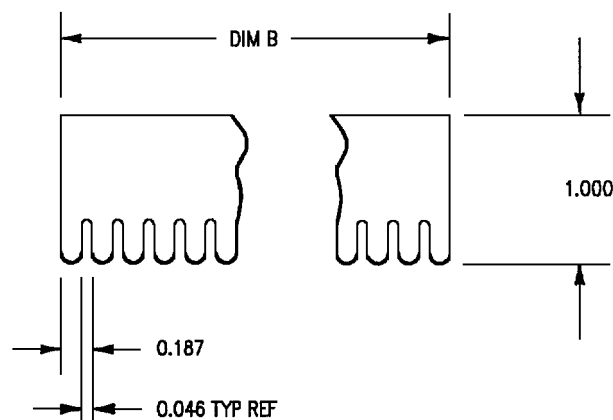


Figure 3. Door 41, EMI Strips Replacement (Sheet 1)



74A324672-2055
74A324672-2057



74A324672-2059
74A324672-2061

MATERIAL	DASH NO.	DIM A	DIM B
ST9M622-2	-2055	2.96	
ST9M622-2	-2057	12.30	
ST9M622-2	-2059		2.96
ST9M622-2	-2061		12.30

Figure 3. Door 41, EMI Strips Replacement (Sheet 2)

ORGANIZATIONAL AND DEPOT MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE ALUMINUM AND TITANIUM COVERS AND DOORS,
Y453.000 THROUGH Y518.000 REPLACEMENTS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Form In Place Sealing	WP010 00
Aft Center Fuselage Finish System and Markings	WP033 00
Structure Illustrated Parts Breakdown-Center Fuselage	A1-F18AC-SRM-430
Structure Assy-Fus CTR Sect, Y383-Y557.500	FIG004 00
Cover, Access-Fus Ctr Sect, Lwr, Y383-Y518, Instl of	FIG006 00
Fuselage Section Segment-Ctr, Y453.000 to Y557.500	FIG010 00
Door, Access-Missile Launcher Electrical Sys, Instl of	FIG012 00
Structure Repair, General Information	A1-F18AC-SRM-200
Locating Blind Holes and Trim Lines	WP004 03
Gang Channel Identification and Repair	WP004 05
Structural Hardware	NAVAIR 01-1A-8

Alphabetical Index

Subject	Page No.
Replacements	2

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 44	12 Feb 88	Wing Center and Aft Fuselage Fatigue Improvement (ECP MDA-F/A-18-00045)	1 Feb 90	-

Support Equipment Required

None

Materials Required

None

1. REPLACEMENTS.

2. Fastener attaching hardware is shown for covers below:

a. Cover, door 41, is replaceable and requires trimming and drilling. Fastener attaching hardware is shown on figure 1. For fasteners (A1-F18AC-SRM-430, FIG 010 00). Replacement of door requires installing new form in place seal (A1-F18AC-SRM-500, WP010 00). Location of excess material for trim and fastener hole size is shown on figure 1. For locating blind holes and trim lines (A1-F18AC-SRM-200, WP004 03). Apply finish system as required (A1-F18AC-SRM-500, WP033 00). For replacement rivets attaching plate nuts and gang channels (A1-F18AC-SRM-200, WP004 05).

b. Cover, door 42, is interchangeable. Fastener attaching hardware is shown on figure 2. For flare lock fasteners (A1-F18AC-SRM-430, FIG 006 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). Replacement of door requires installing new form in place seal (A1-F18AC-SRM-500, WP010 00). Apply finish system as required (A1-F18AC-SRM-500, WP033 00). For replacement rivets attaching receptacles (A1-F18AC-SRM-200, WP004 05).



The forward sill of door 44 is the Y488 Bulkhead and is fracture critical. Do not alter or add holes to the Y488 Bulkhead. See figure 3 for holes in fracture critical locations.

c. Skin, Door 44, is interchangeable. Fasteners attaching clips, nutplates and gang channels are shown on figure 3. For door attachment fasteners, see A1-F18AC-SRM-430, FIG 010 00. Instructions for repair or replacement of nutplates and gang channels, except as noted, see A1-F18AC-SRM-200, WP004 05. Replacement of clip assemblies and 3M464N8A11-3 gang channel in IDX 11 is depot maintenance. For finish system, see A1-F18AC-SRM-500, WP033 00 as required.

d. Cover, door 47, is interchangeable. Fastener attaching hardware is shown on figure 6. For fasteners (A1-F18AC-SRM-430, FIG 006 00). Replacement of door requires installing new form in place seal (A1-F18AC-SRM-500, WP010 00). Apply finish system

as required (A1-F18AC-SRM-500, WP033 00). For replacement rivets attaching plate nuts and gang channels (A1-F18AC-SRM-200, WP004 05).

e. Cover, door 48, is interchangeable. Fastener attaching hardware is shown on figure 7. For fasteners (A1-F18AC-SRM-430, FIG 010 00). Replacement of door requires installing new form in place seal (A1-F18AC-SRM-500, WP010 00). Apply finish system as required (A1-F18AC-SRM-500, WP033 00). For replacement rivets attaching plate nuts and gang channels (A1-F18AC-SRM-200, WP004 05).

f. Cover, door 57, is interchangeable. Fastener attaching hardware is shown on figure 8. For fasteners (A1-F18AC-SRM-430, FIG 010 00). Replacement of door requires installing new form in place seal (A1-F18AC-SRM-500, WP010 00). Apply finish system as required (A1-F18AC-SRM-500, WP033 00). For replacement rivets attaching plate nuts and gang channels (A1-F18AC-SRM-200, WP004 05).

g. Cover, door 121, is replaceable and requires drilling. Fastener attaching hardware is shown on figure 9. For fasteners (A1-F18AC-SRM-430, FIG 010 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For replacement rivets attaching receptacle (A1-F18AC-SRM-200, WP004 05). Fastener hole size is shown on figure 9. For locating blind holes (A1-F18AC-SRM-200, WP004 03) Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

h. Cover, door 176, is interchangeable. Fastener attaching hardware is shown on figure 10. For fasteners (A1-F18AC-SRM-430, FIG 010 00). For replacement rivets, attaching nut, not shown (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

i. Door 45, 161353 THRU 161944, is interchangeable. Fastener attaching hardware is shown on figure 4. For flare lock fasteners (A1-F18AC-SRM-430, FIG 012 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For replacement rivet attaching plate nuts and receptacles (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

j. Door 45, 161945 AND UP, is interchangeable. Fastener attaching hardware is shown on figure 11. For fasteners (A1-F18AC-SRM-430, FIG 012 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

k. Door 46, 161353 THRU 161944, is interchangeable. Fastener attaching hardware is shown on figure 5. For flare lock fasteners (A1-F18AC-SRM-430, FIG 012 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For replacement rivet attaching plate nuts and receptacles (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00)

l. Door 46, 161945 AND UP, is interchangeable. Fastener attaching hardware is shown on figure 11. For flare lock fasteners (A1-F18AC-SRM-430, FIG 012 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For replacement rivet attaching receptacle (A1-F18AC-SRM-200,

WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

m. Cover, 74A324686 is interchangeable. Fastener attaching hardware is shown on figure 9. For fasteners (A1-F18AC-SRM-430, FIG 004 00). For replacement rivet attaching plate nut (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

n. Skin, 74A324736 is interchangeable. Fastener attaching hardware is shown on figure 9. For fasteners (A1-F18AC-SRM-430, FIG 004 00). For replacement rivet attaching plate nut (A1-F18AC-SRM-200, WP004 05). Apply finish system as required (A1-F18AC-SRM-500, WP033 00).

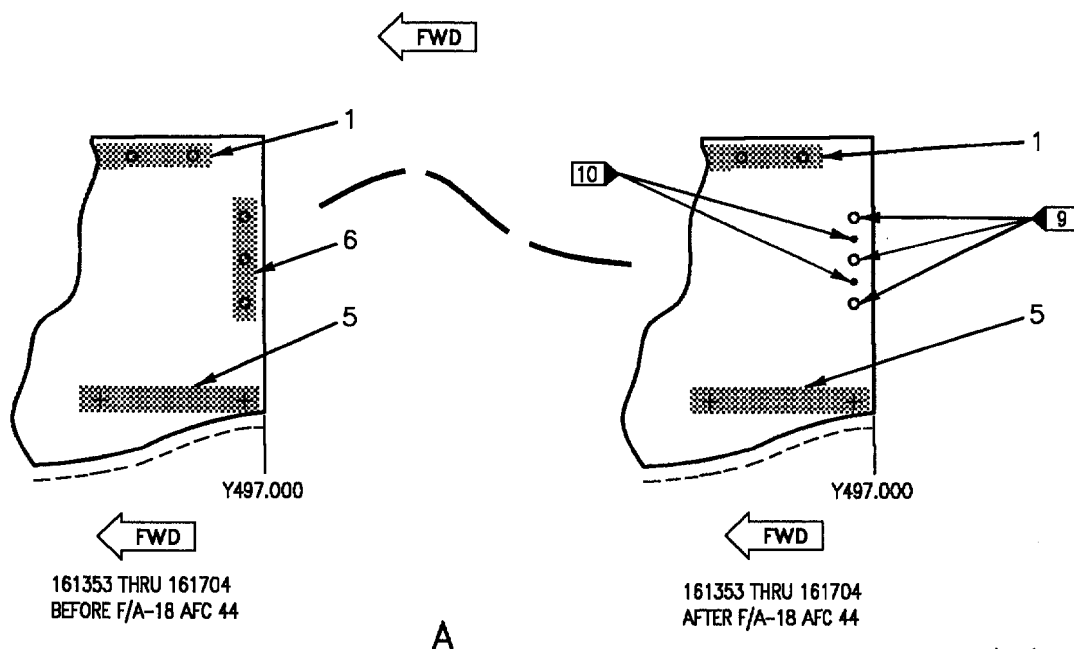
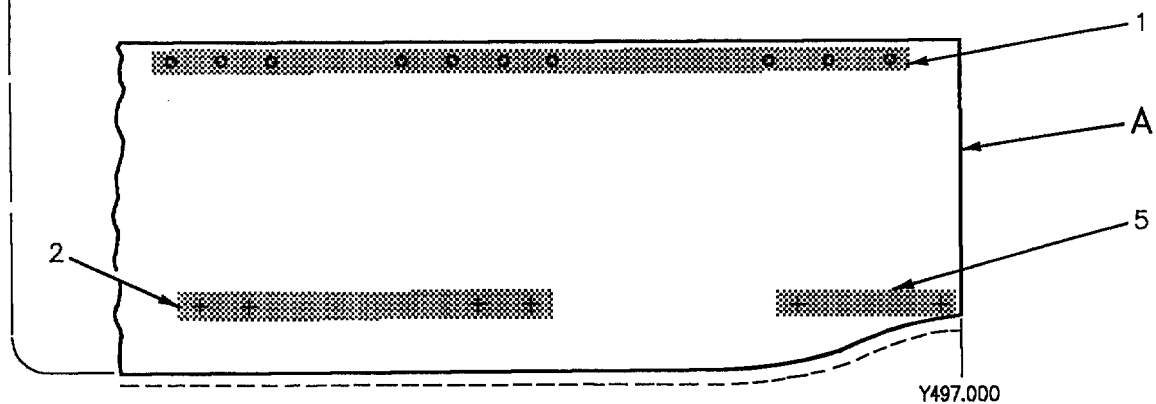
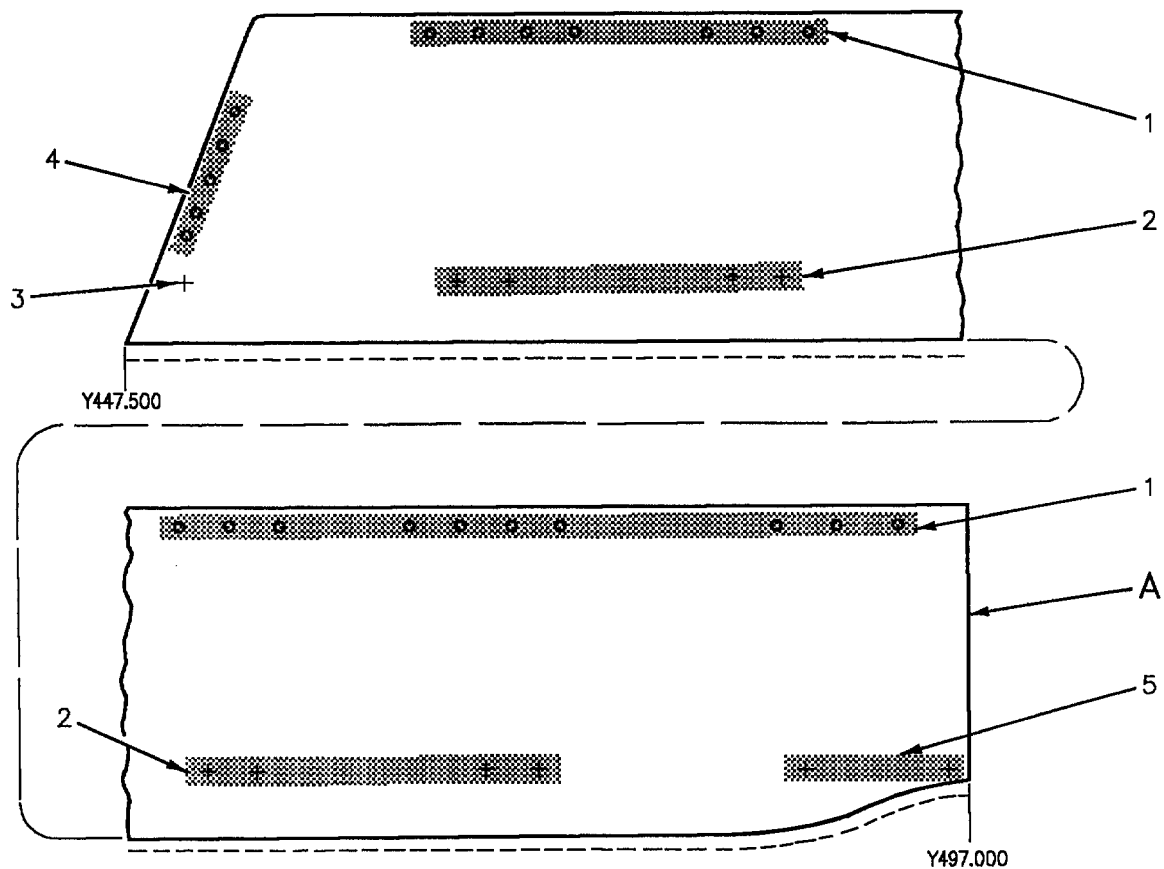


Figure 1. Door 41 Replacement (Sheet 1)


































Idx No.	Eft		Nomenclature	Part Number
1	 	 	Plate Nut Plate Nut	MS21059L4 F14421-1-4
2	 	 	Gang Channel Gang Channel	ST3M464N12A2-1 ST3M544A12A2-1
3	  	 	Plate Nut Plate Nut Plate	F50405-4 F14421-1-4 74A324671-2035
4	 	 	Plate Nut Plate Nut	MS21075L4 MF52099-4
5	 	 	Plate Nut Plate Nut	F50405-4 G14421-1-4
6			Gang Channel	G14421-4-4-10-3
<p style="text-align: center;">LEGEND</p> <p> Hole diameter in cover and structure is 0.281 +0.006 -0.000.</p> <p> Hole diameter in cover is 0.250 +0.006 -0.000 and 0.257 +0.006 -0.000 in structure.</p> <p> 161353 THRU 162444.</p> <p> 162445 AND UP.</p> <p> 161353 THRU 163140.</p> <p> 163141 AND UP.</p> <p> 161742 AND UP.</p> <p> 161353 THRU 161704 Before F/A-18 AFC 44.</p> <p> 161353 THRU 161704 After F/A-18 AFC 44. Hole diameters in cover are plugged with MS20426B8-8 rivets. Hole diameters in structure are plugged with MS20470E10-8A rivets.</p> <p> 161353 THRU 161704 After F/A-18 AFC 44. Hole diameters in structure are plugged with MS20426AD3-4 rivets.</p>				

Figure 1. Door 41 Replacement (Sheet 2)

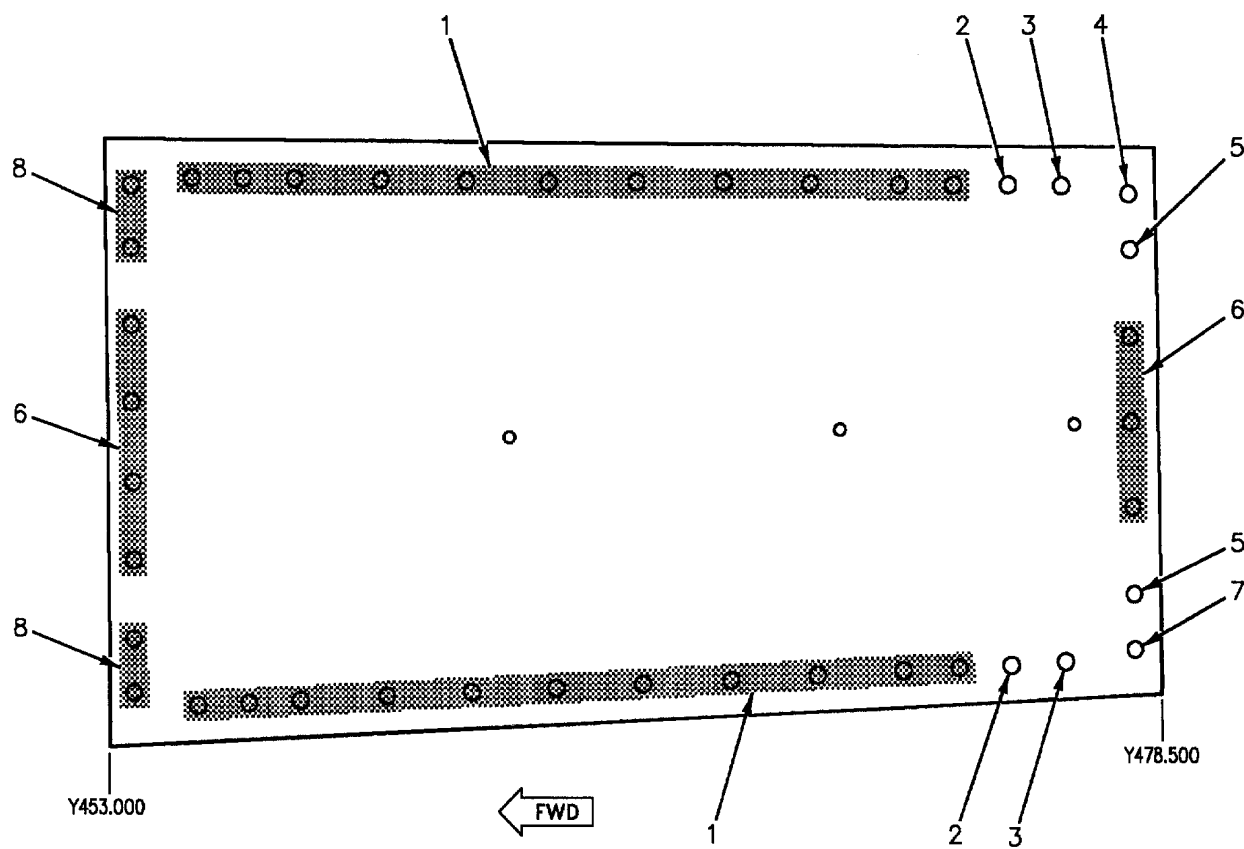


Figure 2. Door 42 Replacement (Sheet 1)




































Idx No.	Eft		Nomenclature	Part Number
1			Receptacle	195012-5-7-1
2			Receptacle	195012-5-6-3
3			Receptacle	195012-5-4-4
4	    	   	Receptacle Receptacle Filler Receptacle Filler	195012-5-2-6 196012-5-1-9 74A321600-2063 196012-5-2-6 74A321600-2069
5	  	 	Receptacle Receptacle Shim	195012-5-2-6 195012-5-2-7 74A321600-2067
6			Receptacle	195012-5-8-0
7	    	   	Receptacle Receptacle Filler Receptacle Filler	195012-5-2-6 196012-5-1-9 74A321600-2064 196012-5-2-6 74A321600-2070
8			Receptacle	195012-5-5-3
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.314 +0.007 -0.000.</p> <p> 161716 THRU 161750.</p> <p> 161751 AND UP.</p> <p> 161353 THRU 161715.</p> <p> 161947 AND UP.</p> <p> 161353 THRU 161946.</p> <p> 161751 THRU 161946.</p>				

Figure 2. Door 42 Replacement (Sheet 2)

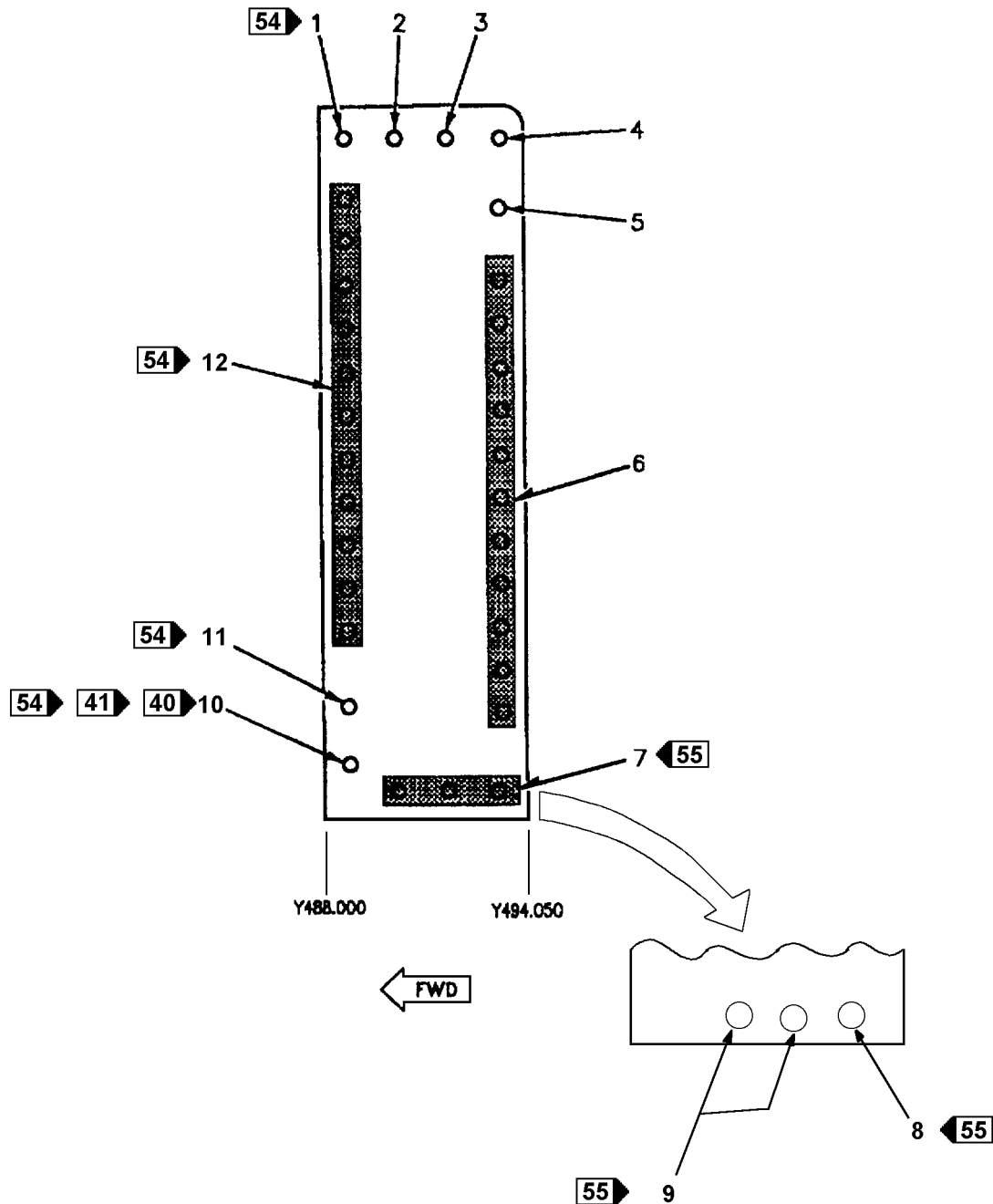


Figure 3. Door 44 Replacement (Sheet 1)

Idx No.	Eft		Nomenclature	Part Number
1	<div>3</div> <div>3</div> <div>6</div> <div>8</div>	<div>54</div> <div>54</div> <div>54</div>	<div>2</div> Plate Nut Shim <div>5</div> Clip Assembly <div>5</div> Clip Assembly	MS21076L4 NAS1195D4XH <div>4</div> 74A324523-1011 <div>7</div> 74A324523-1019
2	<div>10</div> <div>8</div> <div>3</div> <div>11</div>	<div>12</div>	<div>9</div> Plate Nut <div>9</div> Plate Nut Shim Shim	MS21076L4 3M1050C4 NAS1195D4XH NAS1195D4XH
3	<div>10</div> <div>8</div> <div>3</div> <div>15</div> <div>17</div>	<div>13</div> <div>14</div> <div>16</div>	<div>9</div> Plate Nut <div>9</div> Plate Nut Shim Shim Shim	MS21076L4 3M1050C4 NAS1195D4XH NAS1195D4XH NAS1195D4XH
4	<div>18</div> <div>20</div> <div>8</div> <div>3</div> <div>11</div>	<div>12</div> <div>16</div>	<div>9</div> Plate Nut <div>19</div> <div>19</div> Plate Nut Shim Shim	MS21076L4 3M1050C4 NAS1195D4XH NAS1195D4XH
5	<div>11</div>		<div>21</div> Plate Nut Shim	ST3M542-4A6 4M30E416-125
6	<div>11</div>		<div>22</div> Gang Channel Shim	3M464N8A11-6 4M49A4D8-11
7	<div>37</div>	<div>55</div>	<div>36</div> Gang Channel Shim	ST3M464N9A3-6 74A324933-2139
8	<div>3</div> <div>27</div> <div>29</div> <div>32</div> <div>33</div>	<div>55</div> <div>55</div> <div>55</div> <div>55</div>	<div>24</div> Clip Assembly <div>26</div> Clip Assembly <div>28</div> <div>31</div> Clip Assembly Shim	<div>23</div> 74A324523-1001/-1002 <div>25</div> 74A324523-1007/-1008 <div>30</div> 74A324523-1015/-1016 74A324933-2097
9	<div>34</div> <div>32</div> <div>3</div> <div>35</div> <div>32</div>	<div>55</div> <div>55</div> <div>12</div> <div>16</div> <div>14</div>	<div>9</div> Plate Nut <div>19</div> Plate Nut Shim Shim Shim	MS21076L4 3M1050C4 NAS1195D4XH NAS1195D4XH NAS1195D4XH
10	<div>3</div> <div>41</div>	<div>54</div> <div>40</div>	<div>39</div> Clip Assembly	<div>38</div> 74A324523-1003/1004

Figure 3. Door 44 Replacement (Sheet 2)

Idx No.	Eft		Nomenclature	Part Number
11	<div>3</div> <div>27</div> <div>29</div> <div>46</div> <div>49</div> <div>37</div>	<div>54</div> <div>54</div> <div>54</div> <div>54</div> <div>54</div> <div>54</div>	<div>2</div> Plate Nut <div>43</div> Clip Assembly <div>44</div> <div>45</div> <div>48</div> Clip Assembly <div>51</div> Clip Assembly	MS21076L4 <div>42</div> 74A324523-1009/1010 <div>47</div> 74A324523-1017/1018 <div>50</div> 74A324523-1025/1026
12	<div>3</div> <div>11</div>	<div>54</div> <div>54</div>	<div>52</div> Gang Channel <div>53</div> Gang Channel	3M464N8A11-4 3M464N8A11-3
<p style="text-align: center;">LEGEND</p> <div>1</div> Hole size 0.250 +0.006 -0.000 for door installation fasteners. <div>2</div> Plate nut and shim attached to structure using MS20426AD3-() rivet (two required), flush near side. Length determined upon installation. <div>3</div> 161353 THRU 161704. <div>4</div> MS21076L4 plate nut, NAS1195D4XH shim and NAS1195D4XM shim attached to clip only, not to the Y488/Door 44 sill, using NAS1097AD3-() rivet (two required). Length determined on installation. <div>5</div> Clip assembly attached to 74A324522 intercostal using MS20470AD5-() rivets (two required). Length determined on installation. Replacement of clip assembly is depot maintenance. <div>6</div> 161705 THRU 162444. <div>7</div> 3M1050A4 plate nut, NAS1195D4XH shim and NAS1195D4XM shim attached to clip only, not to the Y488/Door 44 sill, using NAS1097AD3-() rivet (two required). Length determined on installation. <div>8</div> 162445 AND UP. <div>9</div> Plate nut and shim(s) attached to structure using MS20426AD3-() rivet (two required), near side. Length determined upon installation. <div>10</div> 161353 THRU 162444. <div>11</div> 161705 AND UP. <div>12</div> Three required. <div>13</div> Four required. <div>14</div> Six required. <div>15</div> 161705 THRU 161965. <div>16</div> Five required. <div>17</div> 161966 AND UP. <div>18</div> 161353 THRU 161965. <div>19</div> Plate nut and shims attached to structure using ST3M793-3-9 rivets (two required). <div>20</div> 161966 THRU 162444. <div>21</div> Plate nut and shim (when required) attached to structure using MS20426AD3 rivet (two required), flush near side. Length determined upon installation. <div>22</div> Gang channel and shim (when required) attached to structure using MS20426AD3-() rivets (six required), flush near side. Length determined upon installation. <div>23</div> MS21061L4 plate nut attached to clip only, not to the longeron, using NAS1097AD3-() rivet (two required). Length determined upon installation. <div>24</div> Clip assembly attached to 74A324102 longeron using ST3M416V3-6 (upper) and ST3M416V3-5 (lower) pins and ST3M525N3 collars. Replacement of clip assembly is depot maintenance. <div>25</div> MS21061L4 plate nut, NAS463YD416H shim and NAS463YD416N0 shim attached to clip only, not to the longeron, using NAS1097AD3-() rivet (two required). Length determined upon installation. <div>26</div> Clip assembly and shims attached to 74A324102 longeron using ST3M416V3-6 (upper) and ST3M416V3-5 (lower) pins and ST3M525N3 collars. Replacement of clip assembly is depot maintenance.				

Figure 3. Door 44 Replacement (Sheet 3)

LEGEND (Continued)	
27	161705, 161707.
28	Clip assembly and shim (when required) attached to 74A324102 longeron using ST3M759V3L6 (upper) and ST3M759V3L5 (lower) pins and ST3M525N3ME collars. Replacement of clip assembly is depot maintenance.
29	161706, 161708 THRU 161741.
30	ST3M524-4A4 plate nut and NAS463YD416 shim attached to clip only, not to the longeron, using MS20426AD3-() rivet (two required). Length determined upon installation.
31	Clip assembly attached to 74A314102 longeron using ST3M759V3L4 pin and ST3M525N3ME collar (two required). Replacement of clip assembly is depot maintenance.
32	161742 THRU 162477.
33	161720 THRU 161741.
34	161353 THRU 161741.
35	161705 THRU 161741.
36	Gang channel and shim attached to 74A314102 longeron using MS20426AD3-() rivets (two required), flush near side. Length determined upon installation.
37	162826 AND UP.
38	ST3M725C4M plate nut attached to clip only, not to the Y488/Door 44 sill using NAS1097AD3-() rivet (two required). Length determined upon installation.
39	Clip assembly attached to 74A324102 longeron using ST3M416V4-10 pin and ST3M525N4 collar (two required).
40	Hole plugged after incorporation of AFC-83.
41	161353 THRU 162477.
42	MS21060L4 plate nut attached to clip only, not to the Y488/Door 44 sill using NAS1097AD3-() rivet (two required). Length determined on installation.
43	Clip assembly attached to 74A324102 longeron using ST3M416V4-10 pin and ST3M525N4ME collar. Replacement of clip assembly is depot maintenance.
44	Clip assembly attached to 74A324102 longeron using ST3M759V4L9 pin and ST3M525N4ME collar. Replacement of clip assembly is depot maintenance.
45	Clip assembly attached to 74A324102 longeron using ST3M759V3L7 pin and ST3M525N3 collar. Replacement of clip assembly is depot maintenance.
46	161742 THRU 162444.
47	ST3M541-4A1 plate nut attached to clip only, not to the Y488/Door 44 sill using NAS1097AD3-() rivet (two required), flush near side. Length determined upon installation.
48	Clip assembly attached to 74A324102 longeron using ST3M759V3L7 pin and ST3M525N3ME collar. Replacement of clip assembly is depot maintenance.
49	162445 THRU 162477.
50	ST3M541-4A1 plate nut attached to clip only, not to the Y488/Door 44 sill using MS20426AD3-() rivet (two required). Length determined upon installation.
51	Clip assembly attached to 74A324102 longeron using ST3M759V4L8 pin (two required) and ST3M525N4ME collars. Fastener heads installed on inboard side of longeron. Replacement of clip assembly is depot maintenance.
52	Gang channel attached to structure using MS20426AD3 rivet (six required), flush near side. Length determined upon installation.
53	Gang channel attached to structure using ST3M427C4-6 pin and NAS1080AG04 collar (six required). Replacement of gang channel is depot maintenance.
54	Do not alter holes, locations, or add holes to fracture critical Y488 bulkhead structure at these locations.
55	Do not alter holes, locations, or add holes to maintenance critical longeron at these locations.

Figure 3. Door 44 Replacement (Sheet 4)

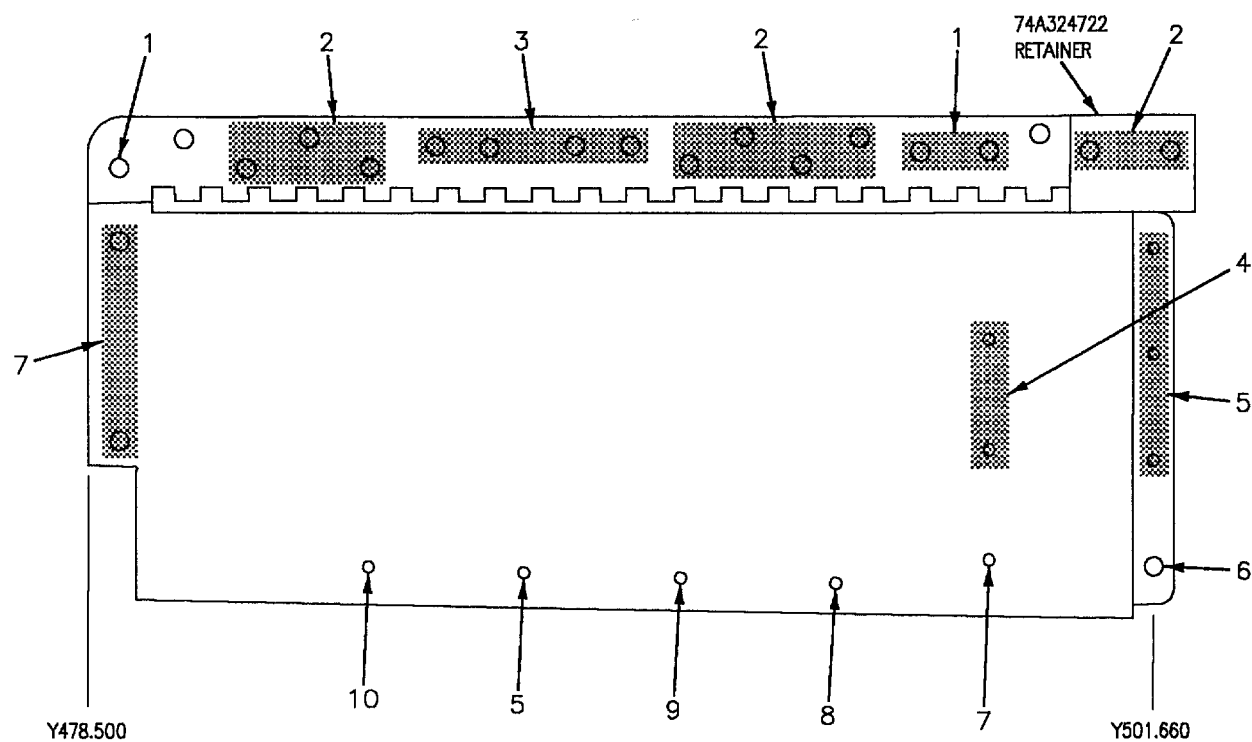


Figure 4. Door 45 Replacement, 161353 THRU 161944 (Sheet 1)





















Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut Plate Nut	F49069-3-2 F49069-3-4
2			Plate Nut Plate Nut	F49069-3-4 F49069-3-6
3			 Plate Nut	F39668-3
4			Receptacle	1950-6-9-1
5			Receptacle	1950-6-9-0
6			Receptacle	1950-6-6-4
7			Receptacle	1950-6-7-3
8			Receptacle	1960-6-9-0
9			Receptacle	196012-6-9-0
10			Receptacle	1950-6-8-2
<p style="text-align: center;">LEGEND</p> <p> Hole diameter in hinge is 0.191 +0.006 -0.000 and 0.228 +0.006 -0.000 in structure.</p> <p> Hole diameter is 0.386 +0.007 -0.000.</p> <p> Hole diameter in cover is 0.377 +0.003 -0.000 and 0.380 +0.007 -0.000 in structure.</p> <p> Hole diameter in doubler is 0.406 +0.007 -0.000 and 0.386 +0.007 -0.000 in structure.</p> <p> 161353 THRU 161519.</p> <p> 161520 THRU 161944.</p> <p> Attached with RV1241-3() rivet. Determine length on installation.</p>				

Figure 4. Door 45 Replacement, 161353 THRU 161944 (Sheet 2)

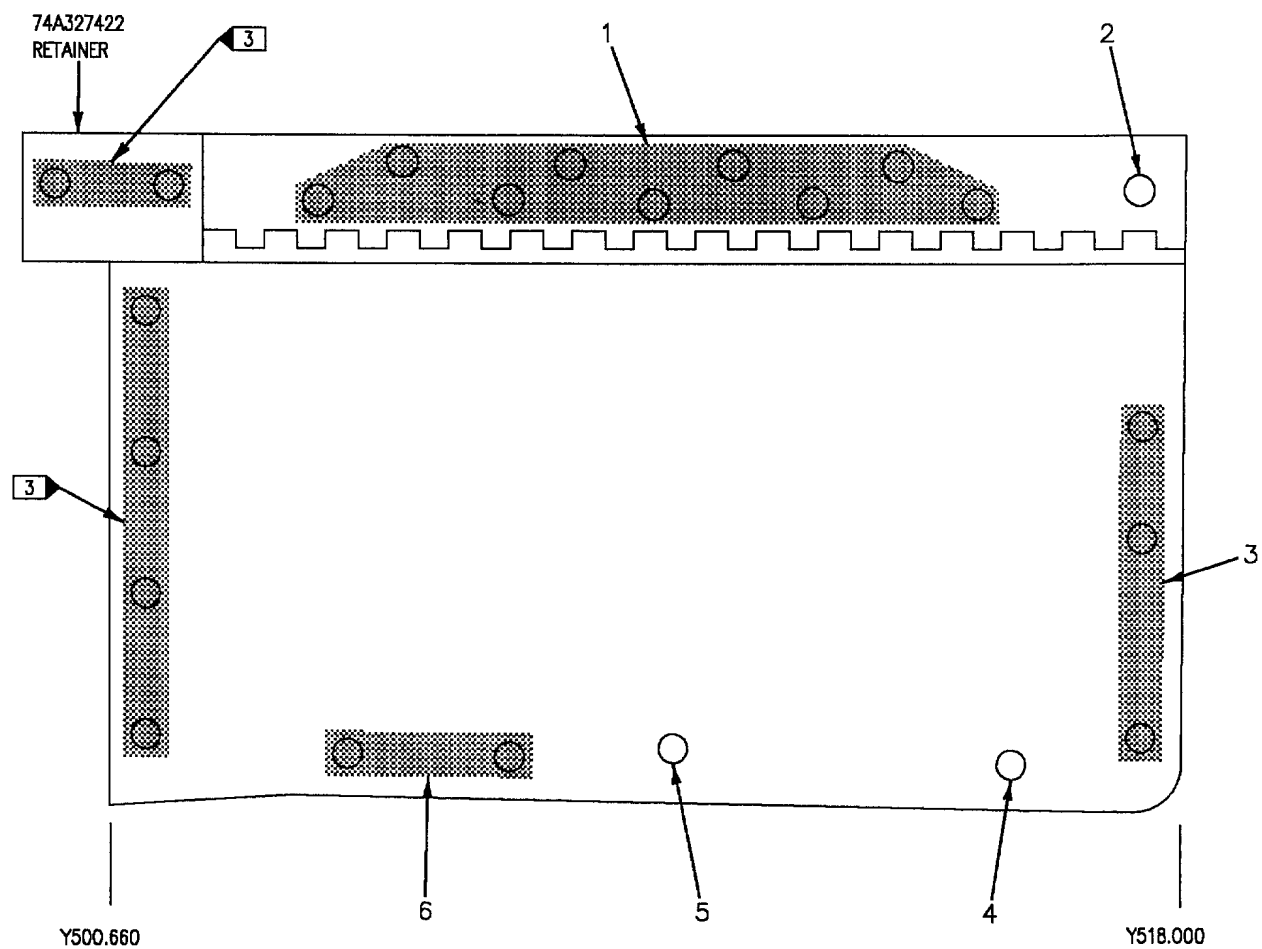


Figure 5. Door 46 Replacement, 161353 THRU 161944 (Sheet 1)























Idx No.	Eft		Nomenclature	Part Number
1	 	 	Plate Nut Plate Nut	F49069-3-4 F49069-3-6
2	 	 	Plate Nut Plate Nut	F39668-3 F49069-3-2
3			Receptacle	1950-6-10-1
4	 	 	Receptacle Receptacle	1960-6-9-1 1950-6-9-1
5			Receptacle	1950-6-6-2
6			Receptacle	1950-6-9-0
<p style="text-align: center;">LEGEND</p> <p> Hole diameter in hinge is 0.191 +0.006 -0.000 and 0.228 +0.006 -0.000 in structure.</p> <p> Hole diameter in cover is 0.377 +0.003 -0.000 and 0.386 +0.007 -0.000 in structure.</p> <p> For attaching hardware, see figure 4.</p> <p> 161355 THRU 161944.</p> <p> 161353 AND 161354.</p> <p> 161353 THRU 161519.</p> <p> 161520 THRU 161944.</p>				

Figure 5. Door 46 Replacement, 161353 THRU 161944 (Sheet 2)

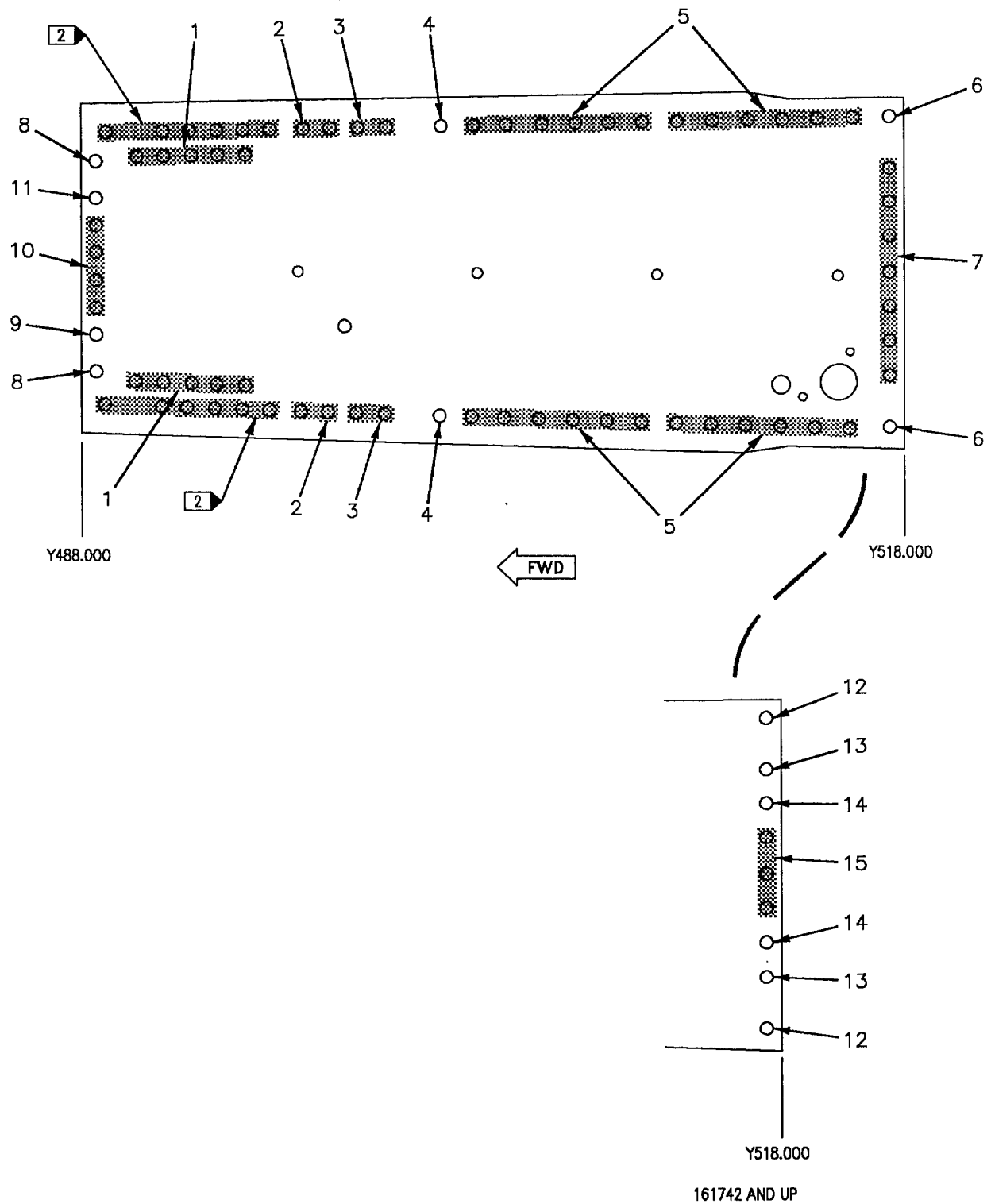


Figure 6. Door 47 Replacement (Sheet 1)
























Idx No.	Eft		Nomenclature	Part Number
1			Gang Channel Shim	74A321600-2013 74A321600-2029
2			Gang Channel Shim	74A321600-2039 74A321600-2041
3			Gang Channel Shim Shim Shim	74A321600-2039 74A321600-2043 74A321600-2045
4			Plate Nut Shim	F50403-4-6 4M30C416-064
5			Gang Channel Shim	74A321600-2007 74A321600-2037
6			Plate Nut	F49251E4-6
7			Gang Channel Shim	74A321600-2021 74A321600-2035
8			Plate Nut  Shim	MS21076L5 NAS1195D5WH
9			Plate Nut Shim	MS21076L5 74A321600-2006
10	 	 	Plate Nut Plate Nut  Shim  Shim	MS21076L4 3M1050C4 NAS1195D4XH NAS1195D4XH
11			Plate Nut Shim	MS21076L5 74A321600-2005
12			Plate Nut	F49251E4-2
13			Plate Nut	F50403-4-2
14			Plate Nut	F50403-4-4

Figure 6. Door 47 Replacement (Sheet 2)












Idx No.	Eft		Nomenclature	Part Number
15			Gang Channel Shim	74A321600-2061 74A321600-2059
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.250 +0.006 -0.000.</p> <p> Clearance hole diameter is 0.625 +0.010 -0.000, 0.040 depth, in cover and 0.750 +0.030 -0.010 thru filler for Hi Lok fastener heads.</p> <p> Two required.</p> <p> Hole diameter is 0.312 +0.007 -0.000 in cover and 0.250 +0.006 -0.000 in structure.</p> <p> 161742 AND UP.</p> <p> One required 161353 THRU 161741.</p> <p> Four required 161742 AND UP.</p> <p> 161353 THRU 162444.</p> <p> 162445 AND UP.</p>				

Figure 6. Door 47 Replacement (Sheet 3)

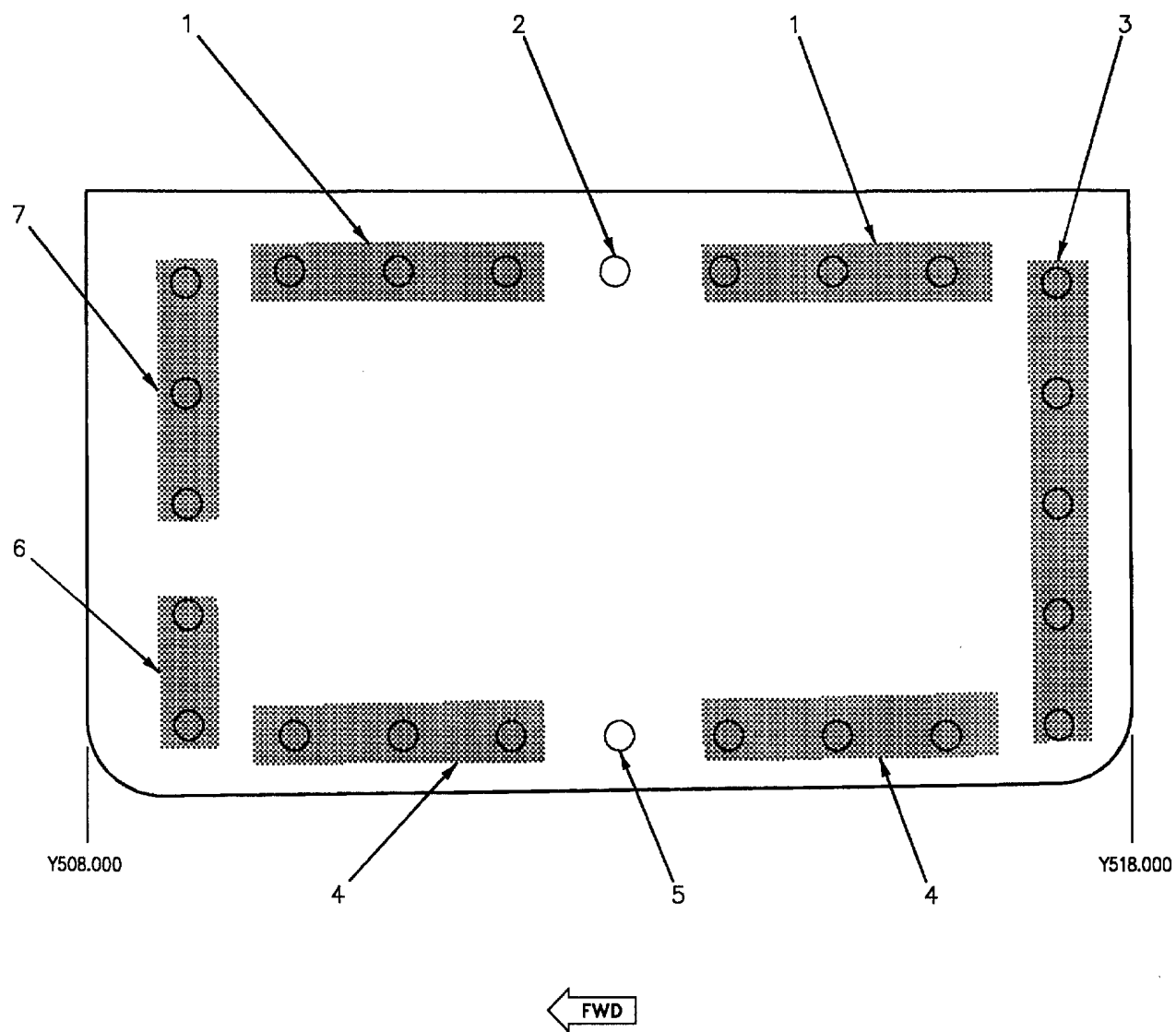


Figure 7. Door 48 Replacement (Sheet 1)

















Idx No.	Eft		Nomenclature	Part Number
1			 Gang Channel	G14421-4-4-8-3
2			 Plate Nut	F49069-4-4
3			 Plate Nut Shim Shim	MS21075L4 NAS1195D4XL NAS1195D4XM
4			Gang Channel	G14421-6-4-8-3
5			Plate Nut	F49069-4-6
6		 	 Plate Nut Shim Shim	MS21075L4 NAS1195D4XH NAS1195D4XM
7			 Plate Nut Shim Shim	MS21075L4 NAS1195D4XH NAS1195D4XM
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.250 +0.006 -0.000.</p> <p> Two required.</p> <p> Attached with RV1241-3 rivet. Determine length on installation.</p>				

Figure 7. Door 48 Replacement (Sheet 2)

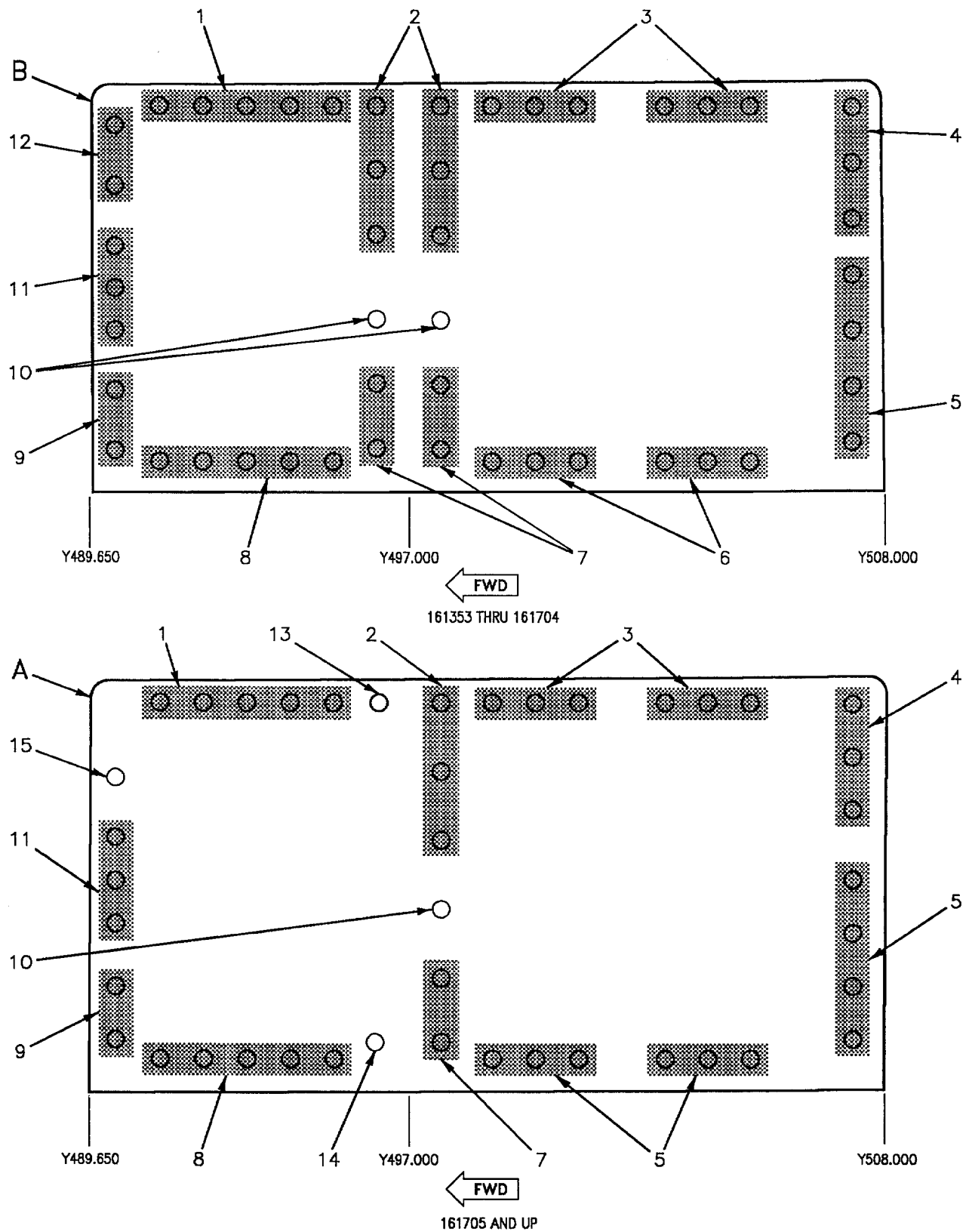
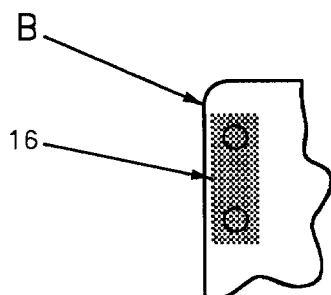
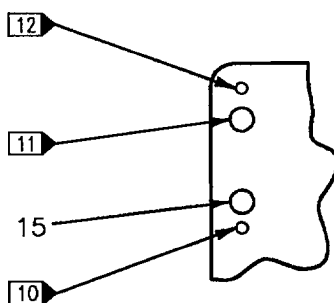


Figure 8. Door 57 Replacement (Sheet 1)



← FWD
161705 THRU 162881

A



← FWD
161353 THRU 162881
AFTER F/A-18 AFC 44

B

Figure 8. Door 57 Replacement (Sheet 2)


























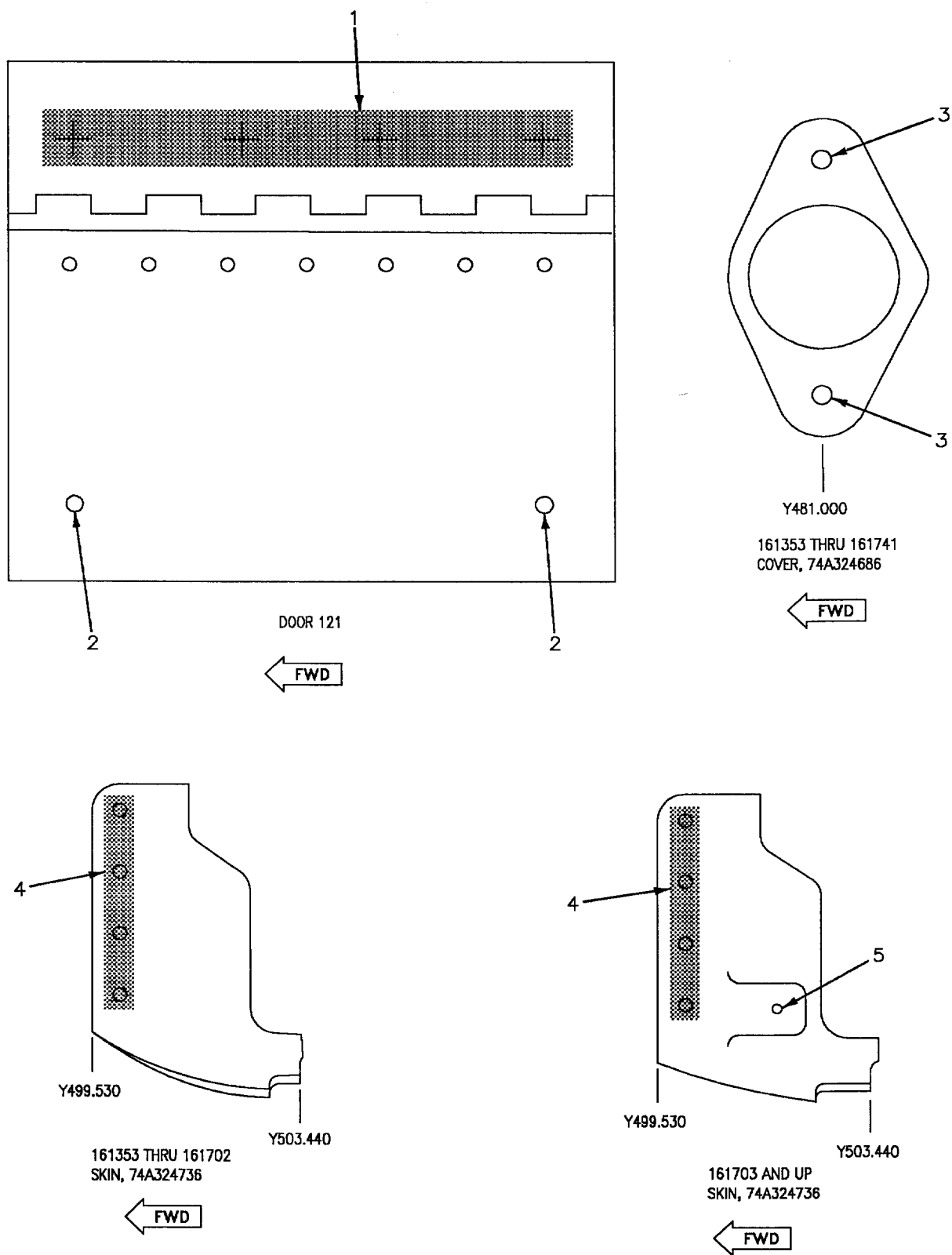
Idx No.	Eft		Nomenclature	Part Number
1			Gang Channel	G14421-6-4-8
2			Gang Channel Filler	G14421-4-4F12 74A324601-2005
3			Gang Channel	G14421-6-4-11
4	 		Gang Channel Filler Filler	G14421-6F10-4 74A324601-2003 74A324601-2019
5			Gang Channel Spacer Filler	G14421-4F10 74A324601-2015 74A324601-2001
6			Gang Channel Shim	G14421-6-4-11 4M49A4DM11-3
7			Gang Channel	G14421-6-4F12
8			Gang Channel Shim	G14421-6-4-8 4M49A4DM8-5
9		 	Plate Nut Shim Spacer	MS21075L4 NAS1195D4XH 74A324601-2011
10			Plate Nut Shim Shim	F49069-4-6 NAS463XDD416H NAS463XDD416L
11			Gang Channel	G14421-6-4-8
12	 		Plate Nut Spacer	MS21075L4 74A324601-2013
13			Plate Nut	F49069-4-4
14			Plate Nut	F49069-4-6
15			Plate Nut	ST3M542-4A1
16	 	 	Gang Channel Gang Channel	ST3M544N14A2F1 ST3M464N14A2F1

Figure 8. Door 57 Replacement (Sheet 3)

Idx No.	Eft		Nomenclature	Part Number
LEGEND				
1			Hole diameter is 0.250 +0.006 -0.000.	
2			Hole diameter in cover is 0.250 +0.006 -0.000 and 0.281 +0.040 -0.031 in structure.	
3			Two required.	
4			162882 AND UP, ALSO 161353 THRU 162881 After F/A-18 AFC 44.	
5			161353 THRU 161741.	
6			161742 AND UP.	
7			161353 THRU 161704 Before F/A-18 AFC 44.	
8			161705 THRU 162444 Before F/A-18 AFC 44.	
9			162445 THRU 162881 Before F/A-18 AFC 44.	
10			161353 THRU 161704 After F/A- 18 AFC 44. Hole diameter in structure is filled with 74R320047 plug.	
11			161353 THRU 162881 After F/A-18 AFC 44. Hole diameter in cover is plugged with MS20426B8-8 rivet. Hole diameter in structure is plugged with ST3M812-4-9 pin and 3M948-4 collar.	
12			161353 THRU 161704 After F/A- 18 AFC 44. Hole diameter in longeron is filled with HS20426AD3-5 rivet. Hole diameter in former is filled with 74R320047 plug.	

Figure 8. Door 57 Replacement (Sheet 4)



29010901

Figure 9. Door 121, Cover 74A324686, and Skin 74A324736, Replacement (Sheet 1)














Idx No.	Eft		Nomenclature	Part Number
1			Nut Washer Pin	NAS1291C4M AN960C8 HLT51TB5-4
2			Receptacle	195012-6-10-1
3			Plate Nut	MS21060L4
4			Plate Nut	MS21062L3
5			Plate Nut Spacer	MS21062L3 74A324736-9003
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.175 +0.006 -0.006.</p> <p> Hole diameter is 0.386 +0.007 -0.000.</p> <p> 161353 THRU 161741.</p> <p> Hole diameter is 0.257 +0.006 -0.000.</p> <p> 161703 AND UP.</p> <p> Hole diameter is 0.191 +0.006 -0.000.</p>				

Figure 9. Door 121, Cover 74A324686, and Skin 74A324736, Replacement (Sheet 2)

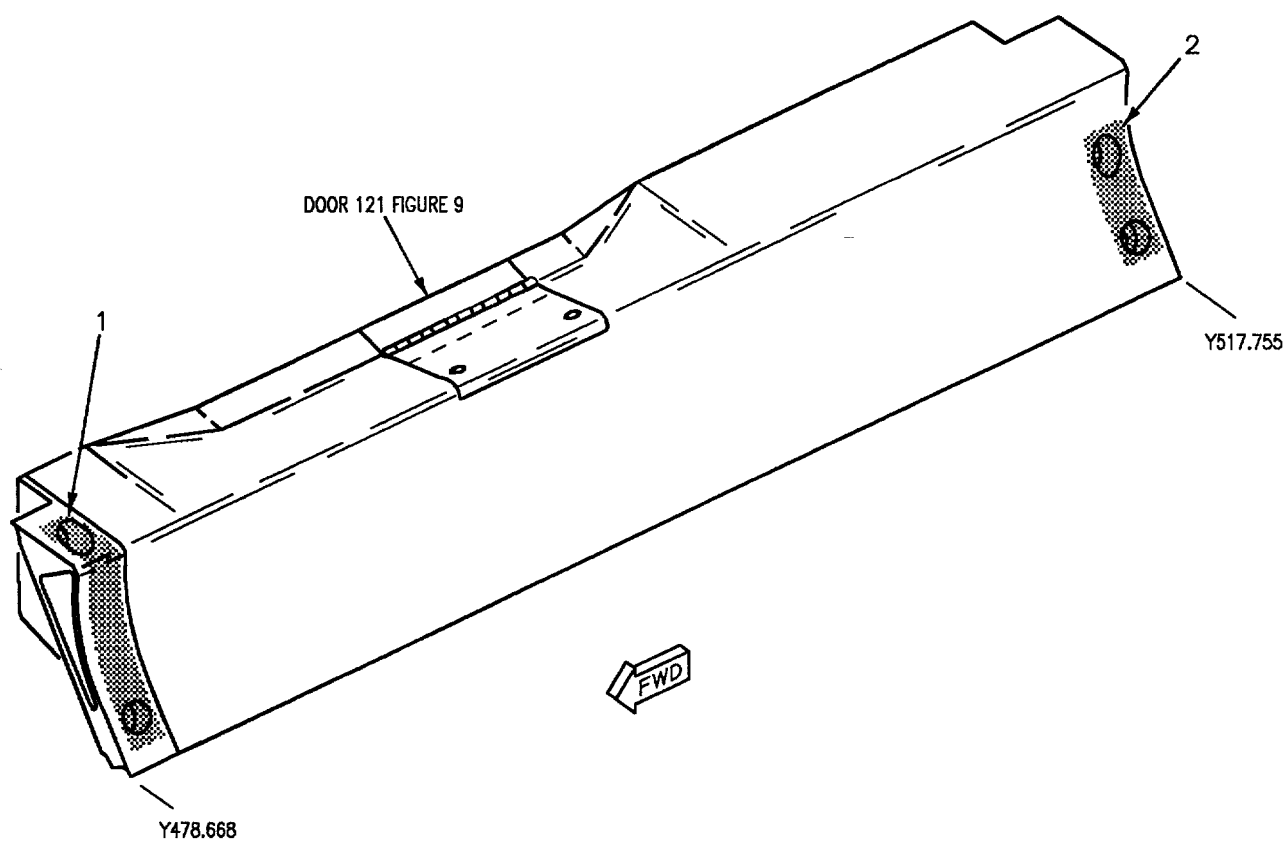


Figure 10. Door 176 Replacement (Sheet 1)












Idx No.	Eft		Nomenclature	Part Number
1			Nut Retainer  Shim Shim Shim	78686-6 NS202293-064 NAS463X-D616 NAS463X-D616M NAS463X-D616L
2			 Nut Retainer  Shim  Shim Shim	78686-7 NS202293-070 NAS463X-D716 NAS463X-D716M NAS463X-D716L
<p style="text-align: center;">LEGEND</p> <p> Hole diameter in cover is 0.3906 +0.007 -0.000 and 0.386 +0.007 -0.000 in structure.</p> <p> Three required.</p> <p> Hole diameter in cover is 0.468 +0.007 -0.000 and 0.4531 +0.0070 -0.0000 in structure.</p> <p> Two required.</p> <p> Attached with BRFS()-() rivet. Determine length on installation.</p>				

Figure 10. Door 176 Replacement (Sheet 2)

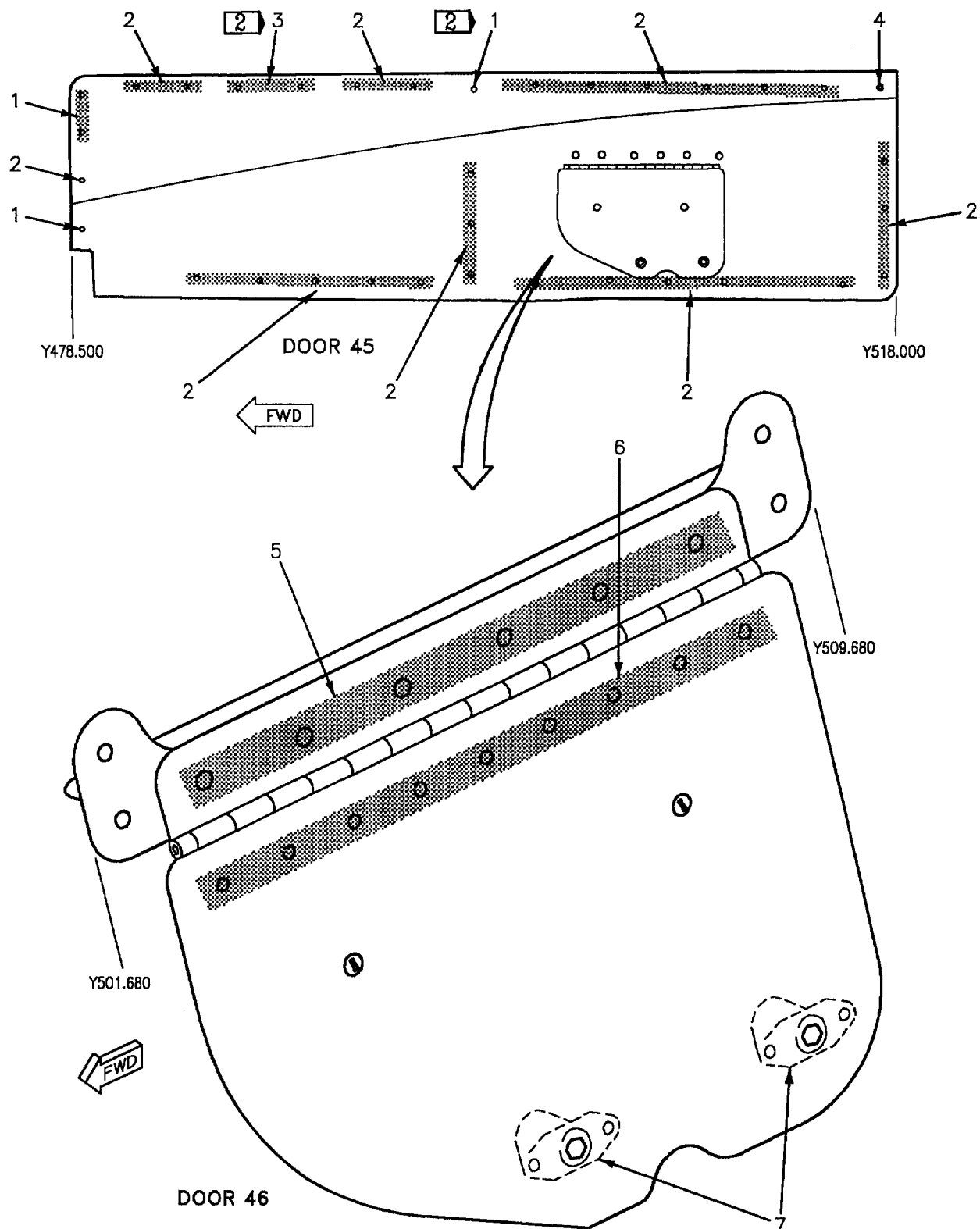


Figure 11. Door 45 and 46 Replacement, 161945 AND UP (Sheet 1)















Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F50339-4-4
2			Plate Nut	F50339-4-6
3			Plate Nut	F50339-4-1
4			Plate Nut	F50339-4-2
5			 Bracket Assy Filler	74A324608-2009 74A324545-2065
6			Rivet	BRFZ6E()
7			Receptacle	1950-6-10-0
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.257 +0.006 -0.000.</p> <p> Attached with RV1241-3() rivet. Determine length on installation.</p> <p> Consists of G10851J3-10-6C Gang Channel and 74A324545-2059 Bracket.</p> <p> Hole diameter is 0.199 +0.006 -0.000.</p> <p> Hole diameter is 0.386 +0.007 -0.000.</p> <p> Hole diameter is 0.161 +0.005 -0.000.</p>				

Figure 11. Door 45 and 46 Replacement, 161945 AND UP (Sheet 2)

ORGANIZATIONAL, INTERMEDIATE, AND DEPOT MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE ALUMINUM COVERS AND DOORS, Y518.000 THROUGH
Y557.500, DAMAGE EVALUATION AND REPAIRS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Stripping	WP007 00
Chemical Treatment	WP008 00
Priming Procedures	WP011 00
Finish System	WP012 00
Aft Center Fuselage Finish System and Markings	WP033 00
Fuel System	A1-F18AC-460-300
Fuel Tank Cavity Preparation	WP039 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Plane Captains Manual	A1-F18AC-PCM-000
Structure Illustrated Parts Breakdown, Center Fuselage	A1-F18AC-SRM-430
Fuselage Section Segment-Ctr, Y453.000 to Y557.000	FIG 010 00
Structure Repair, General Information	A1-F18AC-SRM-200
Introduction	WP002 00
Fasteners	WP004 06
Oversize Fasteners	WP004 07
Cold Working Fastener Holes	WP004 10
Heat Treatment of Aluminum Alloys	WP004 11
EMI Electrical Bonding Strip Contact Verification	WP004 25
Adhesive, Cement, and Sealant; Preparation and Application	WP011 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Aluminum Patch Fabrication	WP006 01
Aluminum, Graphite Epoxy, or Titanium Patch Installation and Removal	WP007 00
Aluminum Sheet, Free of Structure and Land Areas	WP031 00
Aluminum and Titanium Sheet, Formed Structure	WP033 00
Aluminum Sheet Edge Repairs	WP034 00
Aluminum Sheet Repairs Across Structure and Lands	WP036 00
Blending	WP038 00
Aircraft Weapons Systems Cleaning and Corrosion Control	NAVAIR 01-1A-509

Alphabetical Index

Subject	Page No.
Damage Evaluation	2
Negligible Damage	2
Repairable Damage	3

Alphabetical Index (Continued)

Subject	Page No.
Repairs	3
Door 52 Crack Repair, Intermediate Maintenance	10
Door 52 Screen Repair, Intermediate Maintenance	7
Door 116 Repair	12
Permanent Repairs	3
Cracks	3
Dents	6
Edge	6
Holes	5
Scratches, Nicks, Gouges, or Corrosion	3
Replacement	11
EMI Electrical Bonding Strips	11

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
3F/A-18 IAFC 011	8 Jul 82	EMI Shielding of AMAD Bay (ECP MDA-F/A-18-00111)	1 Oct 83	-
F/A-18 AFC 64	24 Jul 85	Center Fuselage Cable Assembly, P/N 74A760213, Inspection/Modification of (Purpose: To Inspect Connector 1P-R002 Branch of Center Fuselage Cable Assembly, P/N 74A760213, in R/H AMAD Bay for Chafing, Install Grommets, and Reclock Connector 1P-R002) (ECP RAMEC-NORIS-11-84)	15 Oct 85	-
F/A-18 AFC 125	24 APR 89	Installation of Underwater Acoustic Beacon Mounting Cradle (ECP RAMEC-NORIS-33-88)	1 Feb 90	-

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Types of materials used are shown on figure 1. Repair zones are shown on figure 2. Allowable damage limits within repair zones are listed in tables 1 and 2. Damages listed below are depot maintenance:

a. Repair to aluminum or titanium sheet free of structure or lands areas, 0.063 inch material or thicker, in zone C1.

b. Repair to sheet formed structure 0.063 inch aluminum or thicker or 0.040 inch titanium or thicker in zone C1.

c. Repair to aluminum or titanium sheet across structure or land areas, 0.063 inch material or thicker, in zone B2.

Damages not listed or exceeding following limits require depot engineering disposition.

3. **NEGLECTIBLE DAMAGE.** Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches

(NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

a. Scratches are not allowed within one diameter from edge of any hole.

b. Smooth dents only, effective diameter at least 20 times depth.

4. REPAIRABLE DAMAGE. Types and limits of damage are listed below and in table 2. Figure and index numbers in table 2 coincide with figure and index numbers in material index. Area limit applies after blending.

NOTE

Limits in table 2 apply after blending damage.

a. Scratches.

(1) Any scratches within one diameter of any hole must be blended out. Minimum blend out is one diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.

c. Cracks. All cracks must be repaired.

d. Holes.

(1) Damage in areas free of structure and lands must have edge of cleanup hole at least eight repair fastener diameters from any land, internal structure, or existing row of fasteners.

(2) Damage to lands, over structure. Only one repair per land.

e. Dents exceeding limits in table 1 must be repaired.



Make sure all sharp edges have been removed from fuel tank cavities after repair (A1-F18AC-460-300, WP039 00). Damage to fuel tank can be caused by sharp edges.

5. REPAIRS.

6. Types of repairs are temporary, one-time flight, permanent, critical area, alternate, and typical. Repair type definitions are in structure repair terms (A1-F18AC-SRM-200, WP002 00).

7. PERMANENT REPAIRS.

8. Scratches, Nicks, Gouges, or Corrosion. Blend scratches, nicks, gouges, or corrosion (A1-F18AC-SRM-250, WP038 00). If, after blending, damage limits of table 2 are exceeded, repair aluminum sheet or titanium sheet as below. Refinish blended areas (A1-F18AC-SRM-500, WP033 00).

a. Scratches - make crack or edge repair.

b. Nicks, gouges, or corrosion - make hole or edge repair.

9. Cracks.

a. In repair zones A1, A2, A3, B2 and C1, repair cracks free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) as below:

(1) Stop drill ends of crack in repair zones A1 and A2 or rout out crack in repair zone A3. Completely cut out crack in smallest diameter circle possible in zones B2 and C1.

(2) In repair zones A1, A2 and A3, install lap patch for cracks.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fastener. Cold working or drilling interference fit holes is depot maintenance.

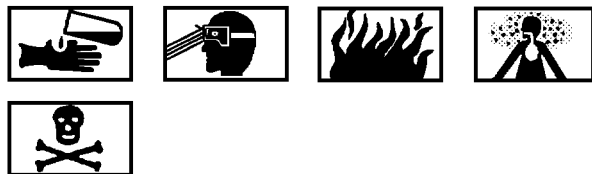
(3) In zones B2 or C1, install type two flush or lap patch.

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair cracks free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut out crack in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).



Adhesive

8

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zones A1, A2, A3 and B2, repair cracks across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In repair zones A1, A2, A3, and B2, make repairs as below:

(a) Damage to Bay Requiring Repair Across land; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zones A1, A2, A3, B2, and C1, repair cracks to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below:

(1) Cut out damage.

(2) In repair zone A1, A2, A3, or B2, install repair one through six. Select repair that can be adapted to damaged part.

NOTE

When making repair in zone C1, to 0.063 inch aluminum or thicker or to 0.040 inch titanium or thicker, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(3) In repair zone C1, install repair four, five or six. Select repair that can be adapted to damaged part.

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

10. Holes.

a. In repair zones A1, A2, A3, B2 and C1, repair holes free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone C1, to 0.063 inch or thicker material, all fastener holes shall be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fastener. Cold working or drilling interference fit holes is depot maintenance.

(2) In repair zones A1, A2, and A3, install a type one flush or lap patch. In repair zones B2 and C1, install type two flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair holes free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut out damage in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).



Adhesive

8

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zones A1, A2, A3 and B2, repair holes across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In repair zones A1, A2, A3, or B2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Lands; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zones A1, A2, A3, B2 and C1, repair holes to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below:

(1) Cut out damage.

(2) In repair zones A1, A2, A3, or B2, install repair one through six. Select repair that can be adapted to damaged part.

NOTE

When making repair in zone C1, to 0.063 inch aluminum or thicker or to 0.040 inch titanium or thicker, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(3) In repair zone C1, install repair four, five, or six. Select repair that can be adapted to damaged part.

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

11. **Edge.** In repair zones A1, A2, A3, and B2, repair edge damage in aluminum sheet (A1-F18AC-SRM-250, WP034 00) as below:

a. Cut out damage.

b. Select and install repair patch as below:

(1) Corner Damage to Lands.

(2) Corner Damage to Lands and Bays.

(3) Edge Damage to Lands.

(4) Edge Damage to Lands and Bays.

(5) Full Width Damage to End.

c. Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

12. **Dents.**

a. In repair zones A1, A2, A3, B2, and C1, repair dents free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone C1, to 0.063 inch or thicker material, all fastener holes shall be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fastener. Cold working or drilling interference fit holes is depot maintenance.

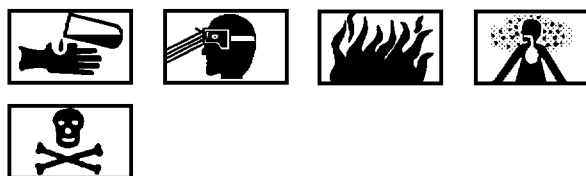
(2) In repair zones A1, A2, and A3, install type one flush or lap patch. In repair zones B2 and C1, install type two flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zone B3, repair dents free of structure or land areas in aluminum sheet (0.050 inch thick or less) as below:

(1) Completely cut out damage in smallest diameter circle possible.

(2) Fabricate patch (A1-F18AC-SRM-250, WP006 01).



Adhesive

8

(3) Install patch using FM300 adhesive (A1-F18AC-SRM-250, WP007 00).

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

c. In repair zones A1, A2, A3 and B2, repair dents across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In repair zones A1, A2, A3 or B2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Lands; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

d. In repair zones A1, A2, A3, B2 and C1, repair dents to aluminum formed structure (A1-F18AC-SRM-250, WP033 00) as below:

(1) Cut out damage.

(2) In repair zones A1, A2, A3 or B2, install repair one through six. Select repair that can be adapted to damaged part.

NOTE

When making repair in zone C1, to 0.063 inch aluminum or thicker or to 0.040 inch titanium or thicker, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or

drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(3) In repair zone C1, install repair four, five or six. Select repair that can be adapted to damaged part.

(4) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

13. **Door 52 Screen Repair, Intermediate Maintenance.** See figure 3. This repair procedure is used to repair damaged screen assembly.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
7075-T-6 Aluminum Sheet, Alclad one side, 0.063 Inch as applicable	QQ-A-250/13 COND. T-6
7075-T76 Aluminum Sheet, Alclad one side, 0.100 Inch as applicable	QQ-A-250-/25 COND. 76
Cheesecloth	CCC-C-440 Type 1, Class 1
Methyl Ethyl Ketone	TT-M-261
Pressure Sensitive Tape, Masking Tape	A-A-883, Type 1
Primer Coating	MIL-P-23377 TY2
Sealing Compound	MILS83430, Class B2
Solid Rivet, 75 Req'd	NAS1097AD4
Solid Rivet, 56 Req'd	NAS1097AD5
Wire Fabric, 3x3 Mesh, 0.047 wire dia.	RRW360, Type 1, Class 1, 304 CRES

- a. Remove door 52 (A1-F18AC-LMM-010).
- b. Drill out rivets attaching screen to door 52 and remove screen assembly.

NOTE

If repair to screen area of door 52 has been done before, go to step m. If repair to screen has not been done before, go to step c.

- c. Trim out noted area in door (detail C).
- d. Deburr edges of trimmed out area.
- e. Fabricate internal doubler 74R090005-2001 (detail B).

NOTE

Do not chamfer edges on external plate.

- f. Fabricate external plate 74R090005-2003 (detail D).
- g. Lay out and drill $0.128 +0.006^{\circ} -0.000^{\circ}$ fastener pattern in internal doubler (detail B).
- h. Mate internal doubler to external plate and clamp together.
- i. Mate drill $0.128 +0.006^{\circ} -0.000^{\circ}$ fastener hole in four corners and install temporary fasteners.
- j. Drill remaining fastener holes.
- k. While still clamped together, countersink all fastener holes near and far side for double flush fastener installation.

- l. Unclamp and deburr all fastener holes.

- m. Mate RRW 360 Type 1, Class 1 wire fabric to internal doubler with countersunk surface away from screen.



Do not drill or distort screen. Damage to screen could cause failure to screen assembly.

- n. Using temporary fasteners in all fastener holes, align holes in screen to coincide with fastener holes in internal doubler.
- o. While still clamped together trim screen around periphery of internal doubler.

- p. Unclamp and deburr all parts.

- q. Apply chemical conversion coating to internal doubler and external plate (A1-F18AC-SRM-500, WP008 00).

- r. Use masking tape to mask periphery of external plate where it will mate door.



Sealing Compound



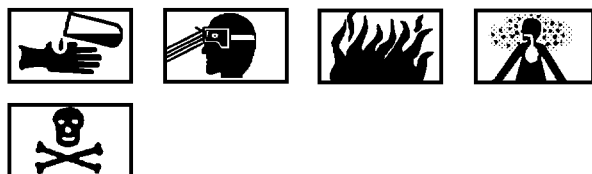
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NOTE

Make sure to apply enough sealing compound to fill all voids in screen assembly.

- s. Lay surface seal all mating surfaces between internal doubler and external plate with sealing compound. For preparation and application (A1-F18AC-SRM-200, WP011 00).

t. Assemble internal doubler, screen and external plate using temporary fasteners in four corners and one in all four sides.



Primer Coating

9

u. Install NAS1097AD4 rivets, wet with primer coating, flush both sides.



Methyl Ethyl Ketone

1

v. Wipe excessive sealing compound with cheesecloth moistened with Methyl Ethyl Ketone then cure sealing compound (A1-F18AC-SRM-200, WP011 00).

w. Lay out and drill 0.161 +0.005 -0.000 fastener pattern in external plate (detail D).

NOTE

Be sure there is 0.060 +0.005 -0.005 gap on all sides between internal doubler and door 52 (section A).

x. Locate external plate of screen assembly to door 52 and clamp together.

y. Mate drill 0.161 +0.005 -0.000 fastener holes in four corners and install temporary fasteners.

z. Drill remaining fastener holes.

aa. Unclamp external plate from door 52.

ab. Countersink external surface on external plate.

ac. Countersink internal surface on door 52.

ad. Deburr fastener holes.

ae. Chamfer all outer edges on external plate of screen assembly (section F).

af. Apply chemical conversion coating to mating surfaces (A1-F18AC-SRM-500, WP008 00).



Sealing Compound

7

ag. Fay surface seal mating surfaces between screen assembly and door 52 with sealing compound. For preparation and application (A1-F18AC-SRM-200, WP011 00).

ah. Mate external plate of screen assembly with door 52 with wet sealing compound on mating surfaces.

ai. Install temporary fasteners in four corners and one in all four sides.

aj. Install NAS1097AD5 rivets, wet with primer coating, flush both sides.

ak. Wipe excessive sealing compound with cheese-cloth moistened with Methyl Ethyl Ketone then cure sealant (A1-F18AC-SRM-200, WP011 00).

NOTE

Do not allow primer or paint to get on screen during refinishing.

al. Apply primer coating (A1-F18AC-SRM-500, WP011 00).

am. Refinish surface (A1-F18AC-SRM-500, WP033 00).

an. Install door (A1-F18AC-LMM-010).

14. Door 52 Crack Repair, Intermediate Maintenance. See Figure 4. This repair procedure is used to repair cracks in bay area of the 74A324649-2031 door.

Support Equipment Required

None

Materials Required

Nomenclature	Specification or Part Number
7075-T-7351 Aluminum Alloy Sheet, Alclad One Side, 0.063 Thick	QQ-A-250-/13 COND. T-7351
Chemical Conversion Material For Coating Aluminum And Aluminum Alloys	MIL-C-81706 Class 1A, Form 3
Sealing Compound	PR-1422-G-A-2
Solid Rivet, (as required)	NAS1097 AD5

a. Safety aircraft (A1-F18AC-PCM-000).

b. Remove door 52 (A1-F18AC-LMM-010).

c. Remove cracked/damaged material from chem-mill pockets (See figure 4). Area removed shall be approx 7.80 X 2.50.

d. Deburr edges of trimmed out area.

e. Fabricate:

(1) External doubler, 0.063 X 14.90 X 10.00

f. Lay out rivet pattern on external doubler (A1-F18AC-SRM-250, WP036 00).

g. Drill, countersink, and deburr rivet holes in external doubler as required.

h. Transfer rivet holes from external doubler to door.

i. Remove finish system from repair area of door (A1-F18AC-SRM-500, WP007 00).

j. Chemically treat external doubler, and door (A1-F18AC-SRM-500, WP008 00).



Sealing Compound



10

k. Fay seal all mating surfaces of external doubler and door (A1-F18AC-SRM-200, WP011 00).

NOTE

Rivet length determined during installation.

l. Install external doubler on door using solid rivets.

m. Apply finish system to repair and door (A1-F18AC-SRM-500, WP012 00 and 033 00).

n. Install door 52 (A1-F18AC-LMM-010).

15. REPLACEMENT.

16. EMI ELECTRICAL BONDING STRIPS. See figure 1. Strips are replaceable.

Support Equipment Required

None

Materials Required

Specification or Part Number	Nomenclature
Contact Strip, Electrical Bonding	ST9M622-()
Rivet (as required)	NAS1097AD
Sealing Compound	MIL-S-8802, CLASS B-1
Sealing Compound	MIL-S-83430 CLASS B-2

a. If replacing forward bonding strips, remove door 54 (A1-F18AC-LMM-010).



Be careful not to enlarge holes when drilling out rivets, damage to door may occur.

b. Drill out rivets attaching damaged EMI strips to door.

c. Remove damaged EMI strips.

d. Prepare surfaces for electrical bonding (A1-F18AC-LMM-000).

e. Cut new EMI strips to size.

f. Position new strips on door.

NOTE

Maintain 0.03 - 0.08 gap between bonding strips.

g. Punch holes in EMI strips.



Sealing Compound

6

h. Electrical seal EMI strips with MIL-S-8802 sealing compound (A1-F18AC-LMM-000).



Do not vibration drive rivets, damage to door may occur.



Sealing Compound

7

i. Prepare MIL-S-83430 sealing compound (A1-F18AC-SRM-200, WP011 00).

NOTE

Length if rivets to be determined on installation.

j. Install rivets wet with MIL-S-83430 sealing compound. Fillet Seal EMI strip with MIL-S-8802 sealing compound (A1-F18AC-SRM-200, WP011 00).

k. Install door 54, if it was removed (A1-F18AC-LMM-010).

l. Verify electrical bonding strip contact (A1-F18AC-SRM-200, WP004 25).

17. DOOR 116 REPAIR. See figure 5.

Support Equipment Required

Nomenclature	Part Number or Type Designation
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Router	-
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Materials Required

Nomenclature	Specification or Part Number
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Aluminum Alloy Sheet, 7075-0, Alclad, 0.040 Inch	QQ-A-250/13
--------------------------------------------------------	-------------

Sealing Compound	MIL-S-83430 Class B-2
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Solid Rivet	BRFS5AD()
-------------	------------

- a. Remove door 116 (A1-F18AC-LMM-010).
- b. Remove cap from door fairing, see detail A.
- c. Rout cracks from corners of door fairing.
- d. Rout off forward and aft door fairing flanges, see detail A.

e. Refinish door fairing (A1-F18AC-SRM-500, WP033 00).

f. Make door fairing doubler, see detail B.

g. Make clips, see detail D.

h. Make shim, see detail D.

i. Have door fairing doubler, clips, and shim heat treated to -T6 (A1-F18AC-SRM-200, WP004 11).

j. Finish inner surface of door fairing doubler and mating surfaces of clips and shim (A1-F18AC-SRM-500, WP033 00).

k. Locate rivet pattern on door fairing doubler, see detail B.

l. Drill rivet holes in door fairing doubler.



Sealing Compound

7

m. Fay seal mating surface of door fairing doubler with sealing compound (A1-F18AC-SRM-200, WP011 00).

n. Rivet doubler to door fairing, see detail C.

o. Locate rivet pattern on clips, shim, and cap, see detail D.

p. Drill rivet holes in clips, shim, and cap.

q. Prime mating surfaces of clips, shim, and cap (A1-F18AC-SRM-500, WP011 00).

r. Assemble clips, shim, and cap, see details D and E.

s. Rivet clips, shim, and cap to door fairing, see detail E.

u. Refinish repair areas (A1-F18AC-SRM-500, WP033 00).

t. Attach door fairing assembly to door, see detail E.

v. Reinstall door 116 (A1-F18AC-LMM-010).

Table 1. Negligible Damage Limits



Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (1)	Door 50	0.030	0.006	0.002	100%	0.015	NA
	Zone A1 Zone A1	0.090	0.018	0.002	100%	0.045	NA
Fig 1 (2) (3) (4) (6)	Door 116	0.090	0.0006	0.0006	100%	0.045	5%
	Zone C1						
	Angle	0.040	0.0006	0.0006	100%	0.020	NA
	Zone C1						
	Cap	0.090	0.0006	0.0006	100%	0.045	5%
Fig 1 (9) (10) (11) (12)	Zone C1	0.090	0.0006	0.0006	100%	0.045	5%
	Fairing						
	Zone C1	0.040	0.0006	0.0006	100%	0.020	NA
	Zone B3	0.050	0.002	0.002	100%	0.025	NA
	Zone B3	0.090	0.011	0.002	100%	0.045	NA
Fig 1 (14) (16)	Plate	0.300	0.036	0.002	100%	NA	NA
	Zone B3	0.060	0.007	0.002	100%	NA	10%
	Doubler	0.040	0.005	0.002	100%	0.020	NA
	Zone B3	0.300	0.036	0.002	100%	NA	NA
	Plate	0.060	0.007	0.002	100%	NA	10%
Fig 1 (17) (18) (19) (20) (21)	Door 174/ 136	0.090	0.0006	0.002	100%	0.045	10%
	Zone B2	0.050	0.0006	0.002	100%	0.025	NA
	Doubler	0.090	0.0006	0.002	100%	0.045	NA
	Zone B2						
	Zone B2						
Fig 1 (17) (18) (19) (20) (21)	Door 51	0.125	0.015	0.002	100%	0.062	NA
	Zone A2	All	0.002	0.002	100%		15%
	Latch	0.051	0.006	0.002	100%		15%
	Zone A2	0.089	0.002	0.002	100%	NA	NA
	Hinge	0.051	0.006	0.002	100%	0.026	NA

Table 1. Negligible Damage Limits (Continued)



Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (22)	Door 52	0.035	0.0006	0.0006	100%	0.018	NA
(24)	Zone B3	0.160	0.0006	0.0006	100%	0.080	NA
(26)	Doubler	0.020	0.0006	0.0006	100%	0.010	NA
	Zone B3	0.020	0.0006	0.0006	100%	0.010	NA
Fig 1 (27)	Door 54	0.057	0.0006	0.0006	100%	0.029	NA
(28)	Zone B3	0.077	0.0006	0.0006	100%	0.039	NA
(29)	Hinge	All	0.0006	0.0006	100%		10%
(32)	Zone B3	0.025	0.0006	0.0006	100%	0.013	NA
(35)	Instruction Plate	All	0.0006	0.0006	100%		10%
	Latch	0.100	0.0006	0.0006	100%	0.050	NA
	Zone B3						
	Drain						
	Zone B3						

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (55)	Door (53) Skin						
	Zone C4	0.040	0.0006	0.0006	100%	0.020	NA
	Zone C4	0.045	0.0006	0.0006	100%	0.023	NA
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
	Zone C4	0.070	0.0006	0.0006	100%	0.035	NA
	Zone C4	0.090	0.0006	0.0006	100%	0.045	5%
	Zone C4	0.160	0.0006	0.0006	100%	0.080	NA
(36)	Angle						
	Zone C4	0.063	0.0006	0.0006	100%	0.032	NA
(37)	Tee						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(38)	Angle						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(39)	Angle						
	Zone C4	0.071	0.0006	0.0006	100%	0.036	NA
(40)	Angel						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(41)	Tee						
	Zone C4	0.078	0.0006	0.0006	100%	0.039	NA
(42)	Channel						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(43)	Angle						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(44)	Stiffener						
	Zone C4	0.070	0.0006	0.0006	100%	0.035	NA
(45)	Tee						
	Zone C4	0.078	0.0006	0.0006	100%	0.039	NA
(46)	Angle						
	Zone C4	0.071	0.0006	0.0006	100%	0.036	NA
(47)	Angle						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
(48)	Angle						
	Zone C4	0.063	0.0006	0.0006	100%	0.032	NA
(49)	Angle						
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (50)	Channel	0.050	0.0006	0.0006	100%	0.025	NA
(51)	Zone C4 Angle	0.050	0.0006	0.0006	100%	0.025	NA
(52)	Zone C4 Stiffener	0.070	0.0006	0.0006	100%	0.035	NA
(53)	Zone C4 Tee	0.050	0.0006	0.0006	100%	0.025	NA
(54)	Channel	0.050	0.0006	0.0006	100%	0.025	NA
(61)	Zone C4 Angle	0.063	0.0006	0.0006	100%	0.032	NA
(62)	Zone C4 Skin	0.090	0.0006	0.0006	100%	0.045	5%
Fig 1 (82)	Door 53 Skin						
	Zone C4	0.040	0.0006	0.0006	100%	0.020	NA
	Zone C4	0.045	0.0006	0.0006	100%	0.023	NA
	Zone C4	0.050	0.0006	0.0006	100%	0.025	NA
	Zone C4	0.060	0.0006	0.0006	100%	0.030	NA
	Zone C4	0.070	0.0006	0.0006	100%	0.035	NA
	Zone C4	0.090	0.0006	0.0006	100%	0.045	5%
	Zone C4	0.160	0.0006	0.0006	100%	0.080	NA
(64)	Angle	0.063					
	Zone C4		0.0006	0.0006	100%	0.032	NA
(65)	Tee	0.050					
	Zone C4		0.0006	0.0006	100%	0.025	NA
(66)	Channel	0.050					
	Zone C4		0.0006	0.0006	100%	0.025	NA
(67)	Channel	0.050					
	Zone C4		0.0006	0.0006	100%	0.025	NA
(68)	Angle	0.050					
	Zone C4		0.0006	0.0006	100%	0.025	NA

Table 1. Negligible Damage Limits (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (69)	Angle	0.071	0.0006	0.0006	100%	0.036	NA
(71)	Zone C4						
(72)	Angle	0.050	0.0006	0.0006	100%	0.025	NA
(73)	Zone C4						
(74)	Tee	0.078	0.0006	0.0006	100%	0.039	NA
(75)	Zone C4						
(76)	Stiffener	0.070	0.0006	0.0006	100%	0.035	NA
(77)	Zone C4						
(78)	Tee	0.078	0.0006	0.0006	100%	0.039	NA
(79)	Zone C4						
(80)	Angle	0.063	0.0006	0.0006	100%	0.032	NA
(81)	Zone C4						
(82)	Angle	0.050	0.0006	0.0006	100%	0.025	NA
(83)	Zone C4						
(84)	Angle	0.050	0.0006	0.0006	100%	0.025	NA
(85)	Zone C4						
(86)	Tee	0.050	0.0006	0.0006	100%	0.025	NA
(87)	Zone C4						
(88)	Stiffener	0.070	0.0006	0.0006	100%	0.035	NA
(89)	Zone C4						
(90)	Angle	0.063	0.0006	0.0006	100%	0.032	NA
(91)	Zone C4						
(92)	Skin	0.090	0.0006	0.0006	100%	0.045	5%
(93)	Zone C4						
NOTE							
<div> <div></div> <div>1</div> <div></div> </div> None Allowed.							

Table 2. Repairable Damage Limits After Blending

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (1)	Door 50	0.030	0.016	0.006	50%	0.006	50%
	Zone A1	0.090	0.018	0.006	50%	0.018	50%
	Zone A1						

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (2)	Door 116	0.090	0.018	0.018	10%	0.018	10%
(3)	Zone C1	0.040	0.008	0.008	10%	0.008	10%
(4)	Angle	0.090	0.018	0.018	10%	0.018	10%
(6)	Zone C1	0.090	0.018	0.018	10%	0.018	10%
	Cap	0.090	0.018	0.018	10%	0.018	10%
	Zone C1	0.090	0.018	0.018	10%	0.018	10%
	Fairing	0.090	0.018	0.018	10%	0.018	10%
	Zone C1	0.090	0.018	0.018	10%	0.018	10%
		0.040	0.008	0.008	10%	0.008	10%
		0.020	0.004	0.004	10%	0.004	10%
		0.071	0.014	0.014	10%	0.014	10%
		0.020	0.004	0.004	10%	0.004	10%
Fig 1 (9)	Door 56	0.050	0.010	0.010	20%	0.010	20%
(10)	Zone B3	0.090	0.018	0.018	20%	0.018	20%
	Zone B3	0.090	0.018	0.018	20%	0.018	20%
	Plate	0.300	0.060	0.060	20%	0.060	20%
(11)	Zone B3	0.0600	0.012	0.012	20%	0.012	20%
	Doubler	0.040	0.008	0.008	20%	0.008	20%
(12)	Zone B3	0.040	0.008	0.008	20%	0.008	20%
	Plate	0.300	0.060	0.060	20%	0.060	20%
	Zone B3	0.0600	0.012	0.012	20%	0.012	20%
	Zone B3	0.0600	0.012	0.012	20%	0.012	20%
Fig 1 (14)	Door 174/						
(16)	136						
	Zone B2	0.090	0.018	0.018	30%	0.018	30%
	Doubler	0.090	0.018	0.018	30%	0.018	30%
	Zone B2	0.050	0.010	0.010	30%	0.010	30%
	Zone B2	0.050	0.010	0.010	30%	0.010	30%
Fig 1 (17)	Door 51	0.125	0.025	0.025	30%	0.025	30%
(18)	Zone A2	0.125	0.025	0.025	30%	0.025	30%
(19)	Latch	0.125	0.025	0.025	30%	0.025	30%
	Zone A2	0.125	0.025	0.025	30%	0.025	30%
(20)	Hinge	0.051	0.010	0.010	30%	0.010	30%
	Zone A2	0.051	0.010	0.010	30%	0.010	30%
(21)	Pin	0.089	0.010	0.010	30%	0.010	30%
	Zone A2	0.089	0.010	0.010	30%	0.010	30%
	Hinge	0.089	0.010	0.010	30%	0.010	30%
	Zone A2	0.051	0.010	0.010	30%	0.010	30%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (22)	Door 52	0.035	0.007	0.007	30%	0.007	30%
	Zone B3	0.160	0.032	0.032	30%	0.032	30%
(24)	Doubler	0.020	0.0040	0.004	30%	0.004	30%
(26)	Zone B3	0.020	0.004	0.004	30%	0.004	30%
Fig 1 (27)	Door 54	0.057	0.011	0.011	30%	0.011	30%
	Zone B3	0.077	0.015	0.015	20%	0.015	20%
(28)	Hinge	All	0.0006	0.0006	100%	0.0006	100%
(29)	Zone B3	All	0.0006	0.0006	100%	0.0006	100%
	Instruction	0.025	0.005	0.005	30%	0.005	30%
	Plate	All	0.0006	0.0006	100%	0.0006	100%
(32)	Zone B3	All	0.0006	0.0006	100%	0.0006	100%
	Latch	0.100	0.020	0.020	30%	0.020	30%
(35)	Zone B3	0.100	0.020	0.020	30%	0.020	30%
	Drain	0.100	0.020	0.020	30%	0.020	30%
	Zone B3	0.100	0.020	0.020	30%	0.020	30%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (55)	Door 53 Skin						
	Zone C4	0.040	0.008	0.008	10%	0.008	10%
	Zone C4	0.045	0.009	0.009	10%	0.008	10%
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Zone C4	0.060	0.012	0.012	10%	0.012	10%
	Zone C4	0.070	0.014	0.014	10%	0.014	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.160	0.032	0.032	10%	0.032	10%
(36)	Angle						
	Zone C4	0.063	0.013	0.013	10%	0.013	10%
(37)	Tee						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(38)	Angle						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(39)	Angle						
	Zone C4	0.071	0.014	0.014	10%	0.014	10%
(40)	Angle						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(41)	Tee						
	Zone C4	0.078	0.016	0.016	10%	0.016	10%
(42)	Channel						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(43)	Angle						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(44)	Stiffener						
	Zone C4	0.070	0.014	0.014	10%	0.014	10%
(45)	Tee						
	Zone C4	0.078	0.016	0.016	10%	0.016	10%
(46)	Angle						
	Zone C4	0.071	0.014	0.014	10%	0.014	10%
(47)	Angle						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(48)	Angle						
	Zone C4	0.063	0.013	0.013	10%	0.013	10%
(49)	Angle						
	Zone C4	0.050	0.010	0.010	10%	0.010	10%

Table 2. Repairable Damage Limits After Blending (Continued)

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig (50)	Channel	0.050	0.010	0.010	10%	0.010	10%
(51)	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(52)	Angle	0.070	0.014	0.014	10%	0.014	10%
(53)	Zone C4	0.050	0.010	0.010	10%	0.010	10%
(54)	Stiffener	0.050	0.010	0.010	10%	0.010	10%
(61)	Zone C4	0.063	0.013	0.013	10%	0.013	10%
(62)	Tee	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Channel	0.050	0.010	0.010	10%	0.010	10%
	Zone C4	0.063	0.013	0.013	10%	0.013	10%
	Angle	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Skin	0.063	0.013	0.013	10%	0.013	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%
Fig 1 (82)	Door 53						
	Skin	0.040	0.008	0.008	20%	0.008	20%
	Zone C4	0.045	0.009	0.009	20%	0.009	20%
	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Zone C4	0.060	0.012	0.012	10%	0.012	10%
	Zone C4	0.070	0.014	0.014	10%	0.014	10%
	Zone C4	0.090	0.018	0.018	10%	0.018	10%
	Zone C4	0.160	0.032	0.032	10%	0.032	10%
	Angle						
(64)	Zone C4	0.063	0.013	0.013	10%	0.013	10%
	Tee						
(65)	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Channel						
(66)	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Channel						
(67)	Zone C4	0.050	0.010	0.010	10%	0.010	10%
	Angle						
(68)	Zone C4	0.050	0.010	0.010	10%	0.010	10%

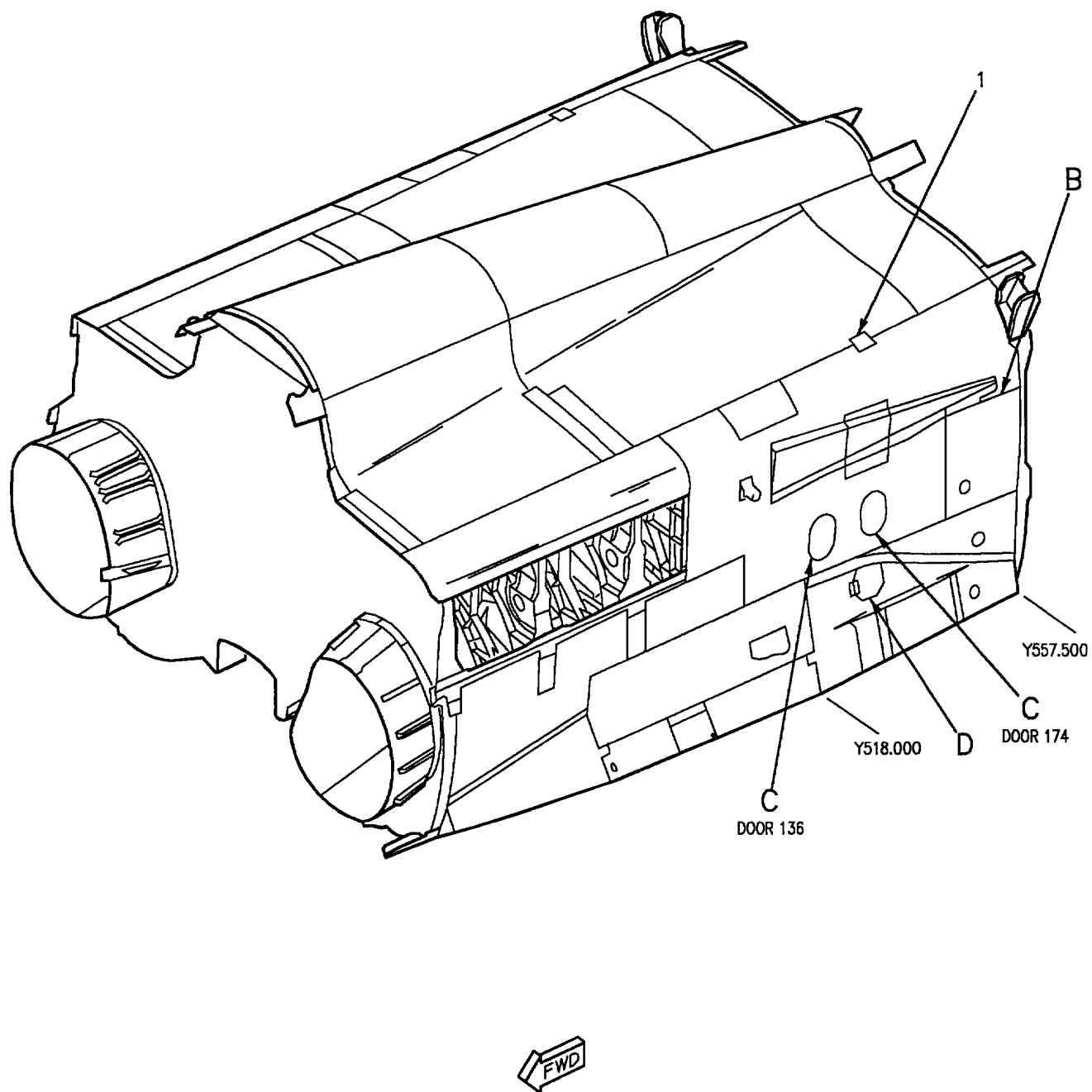
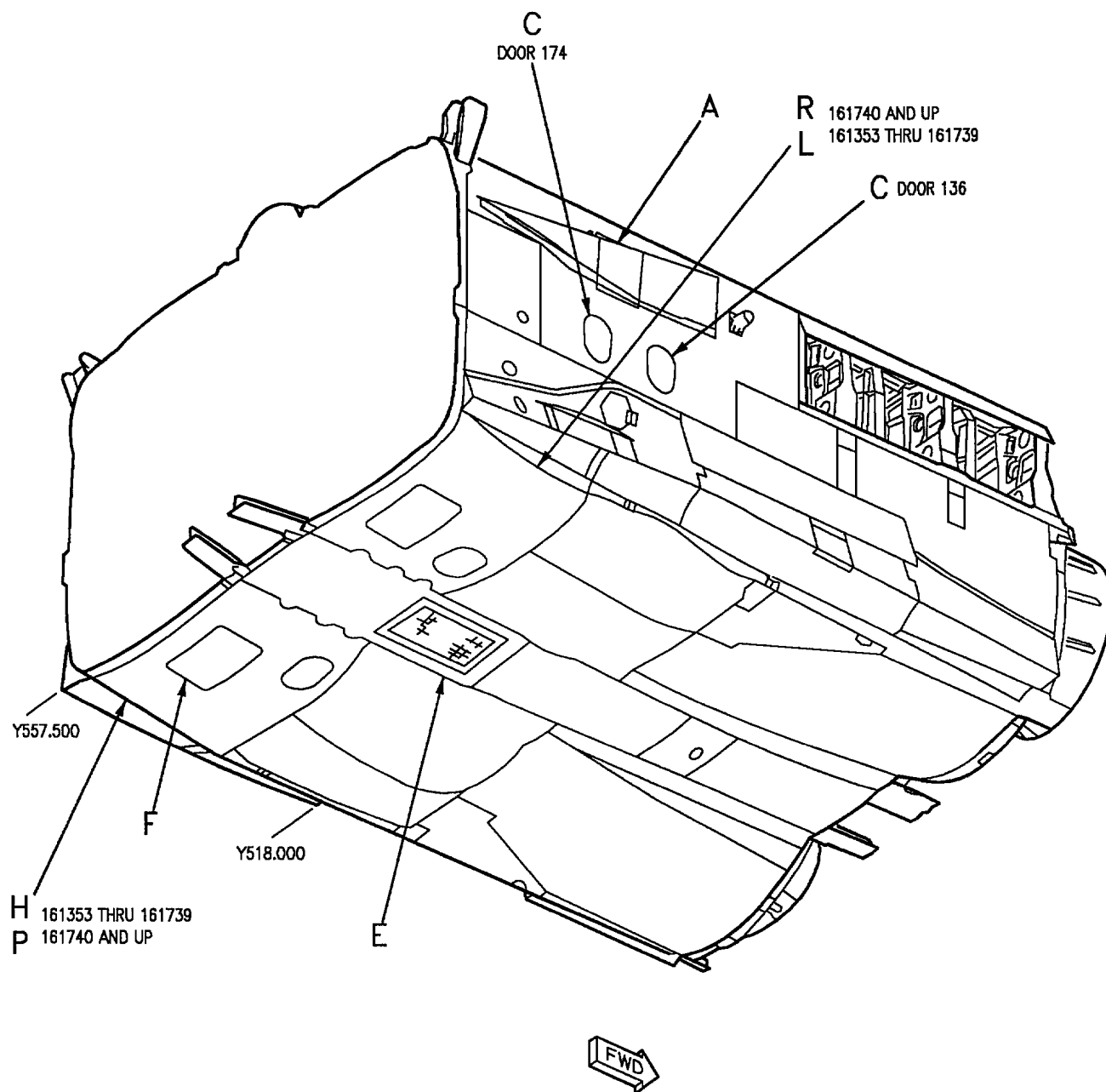


Figure 1. Material Index (Sheet 1)



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Figure 1. Material Index (Sheet 2)

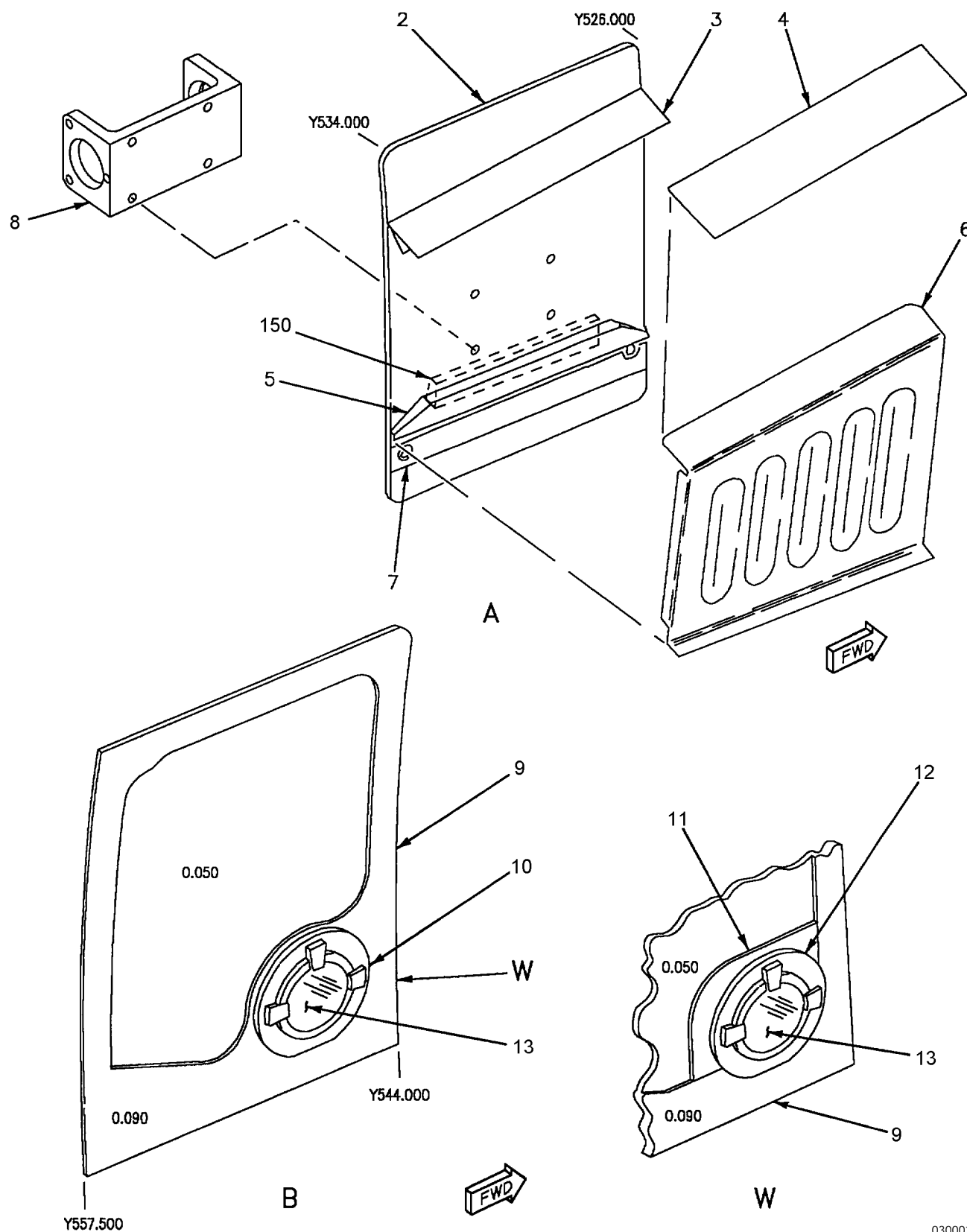


Figure 1. Material Index (Sheet 3)

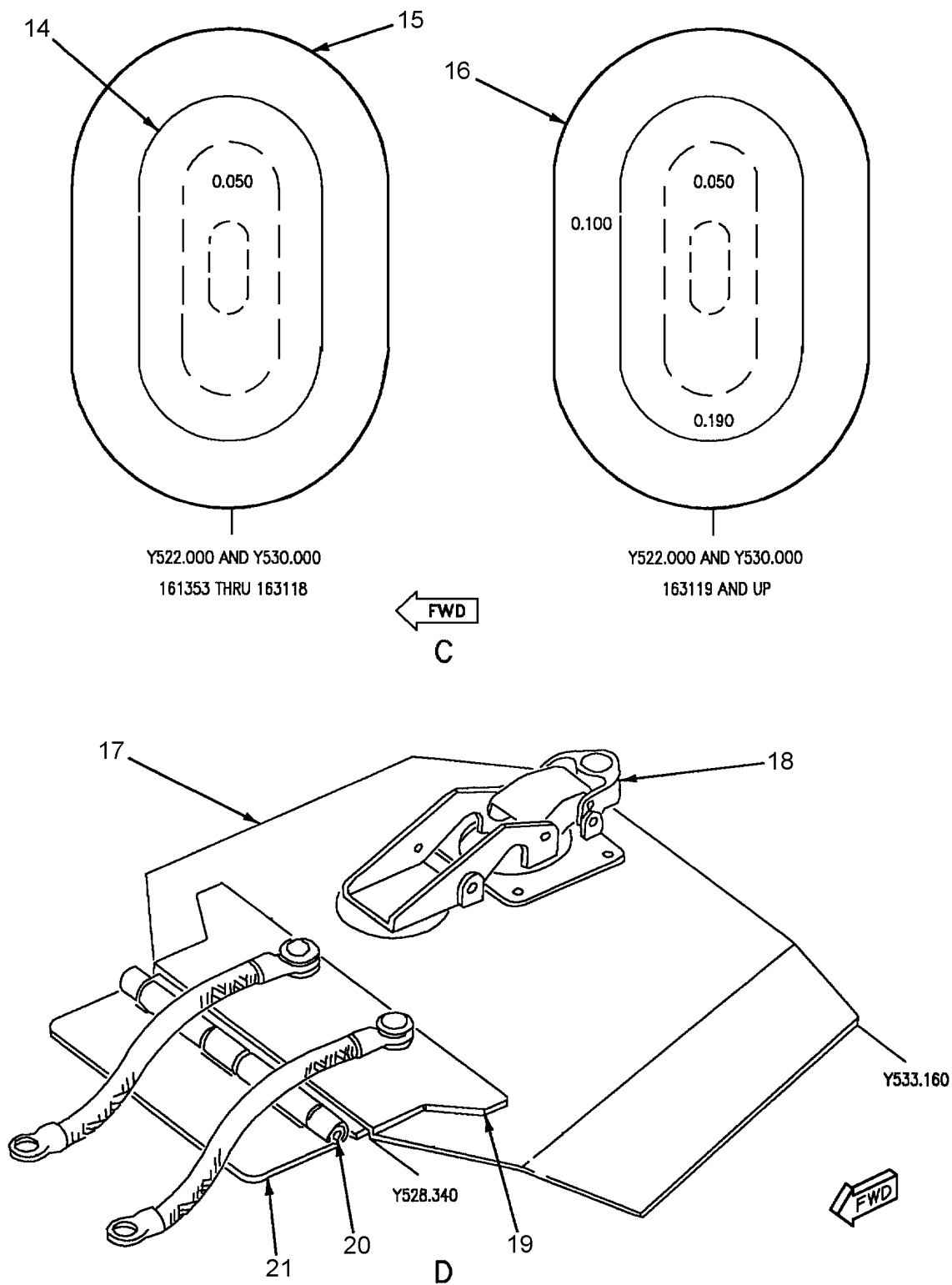


Figure 1. Material Index (Sheet 4)

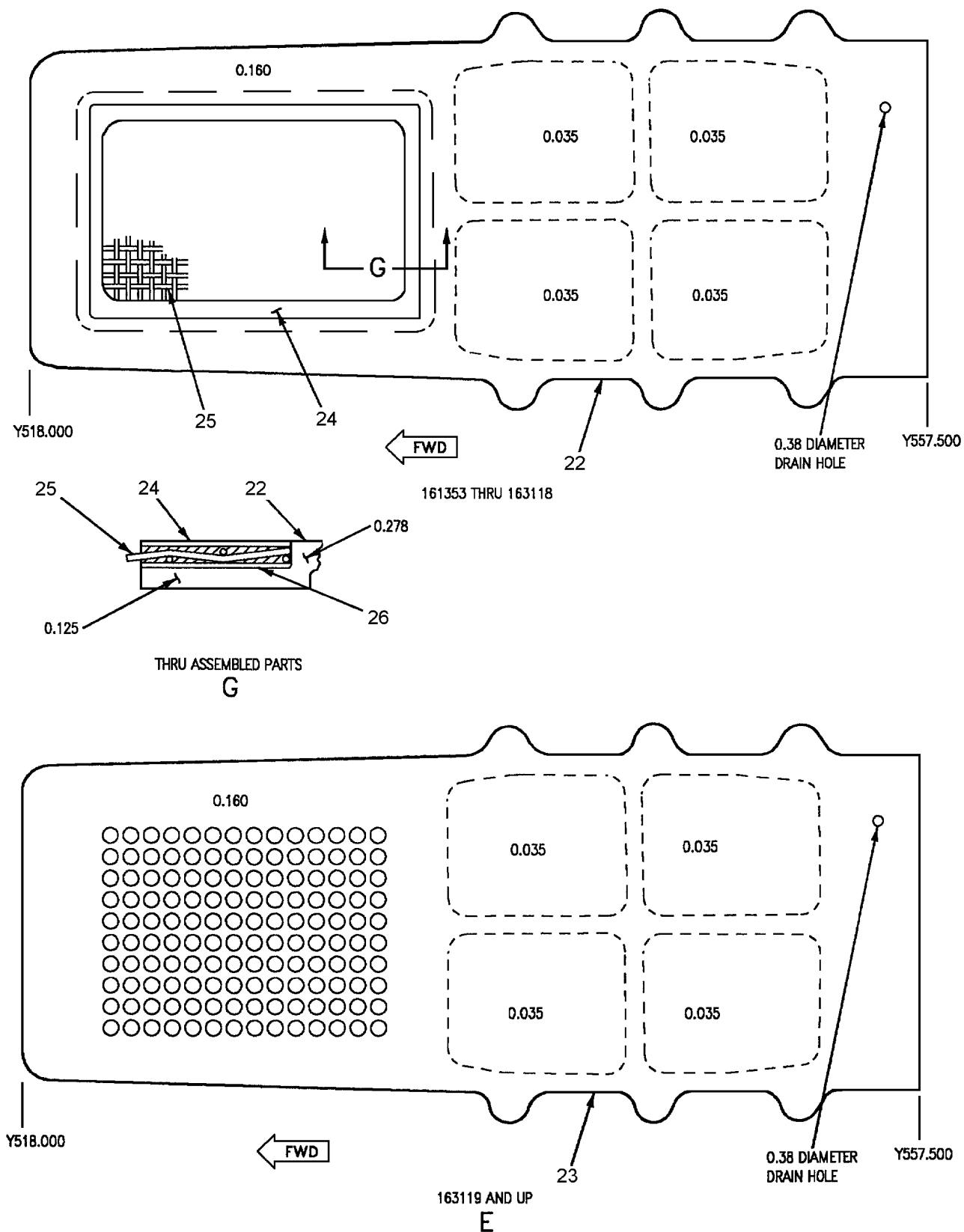


Figure 1. Material Index (Sheet 5)

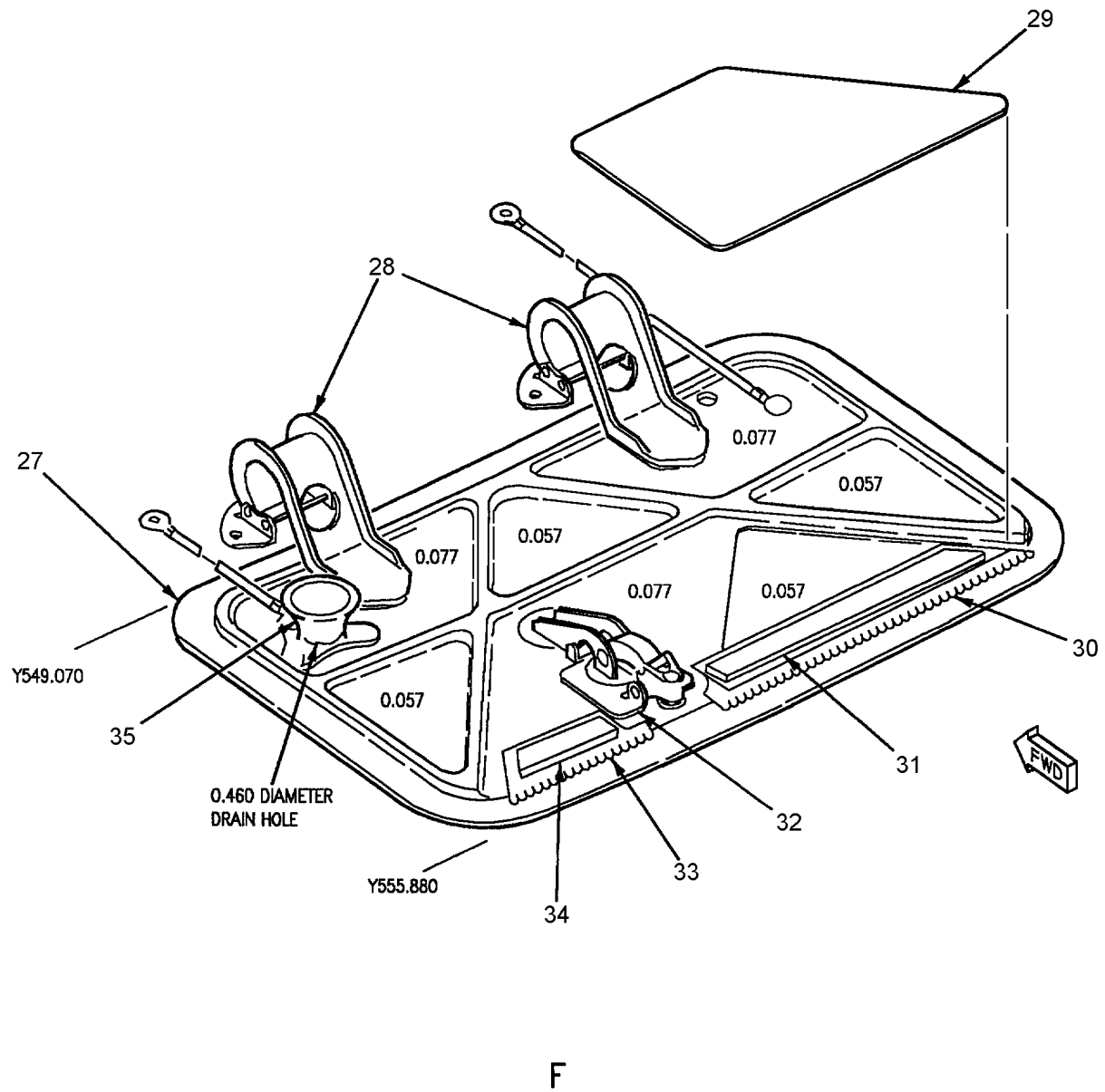


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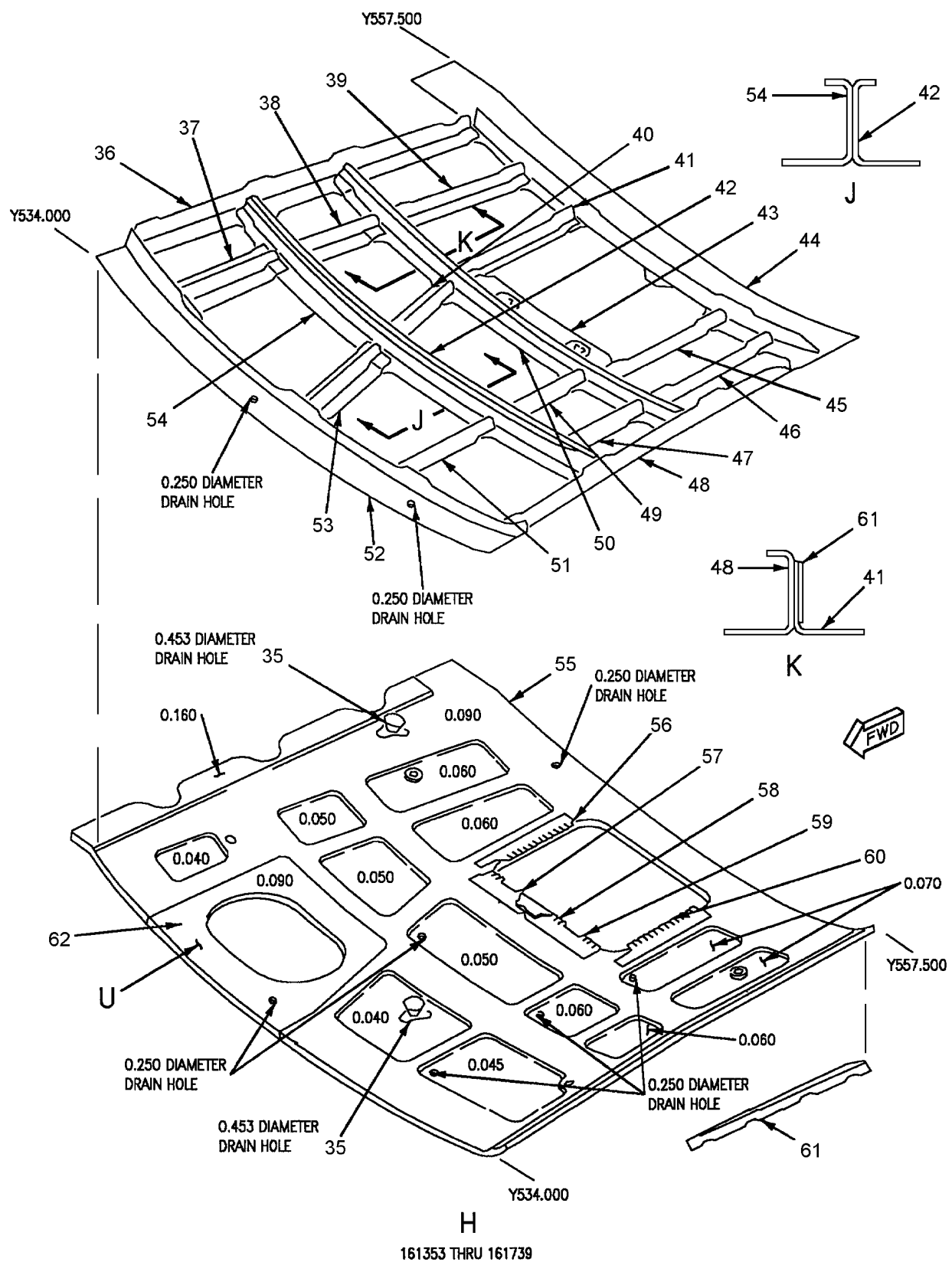


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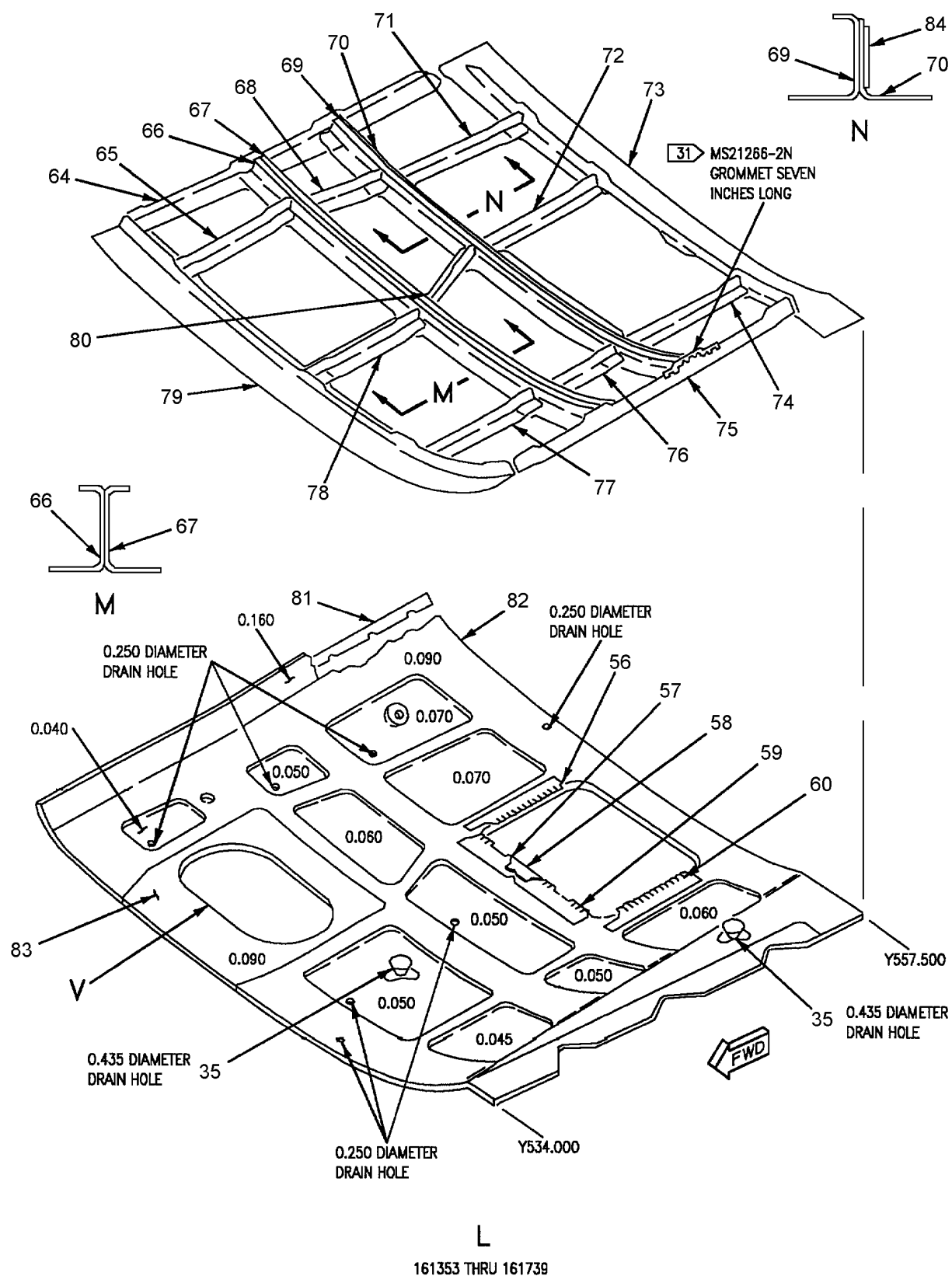


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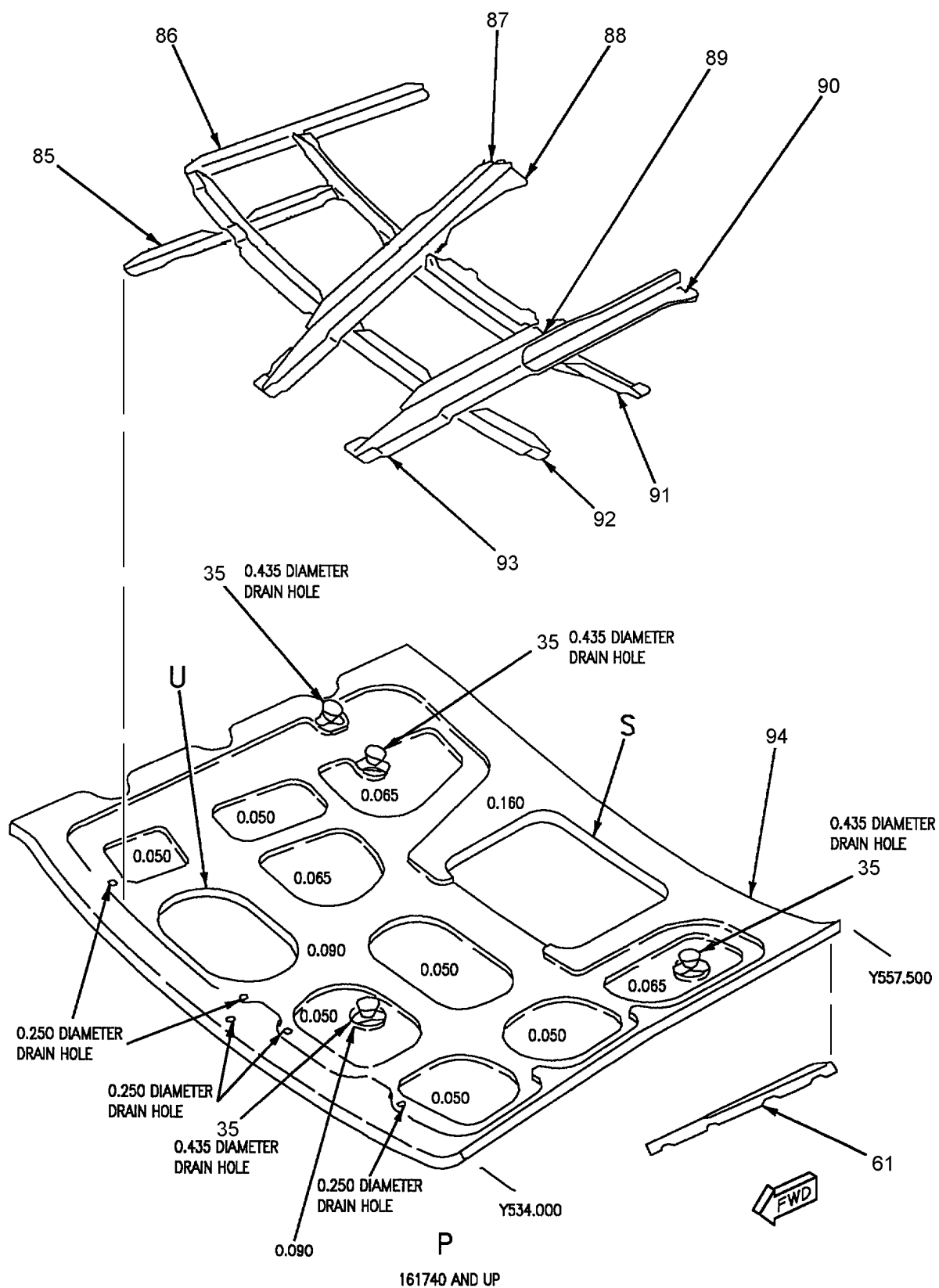
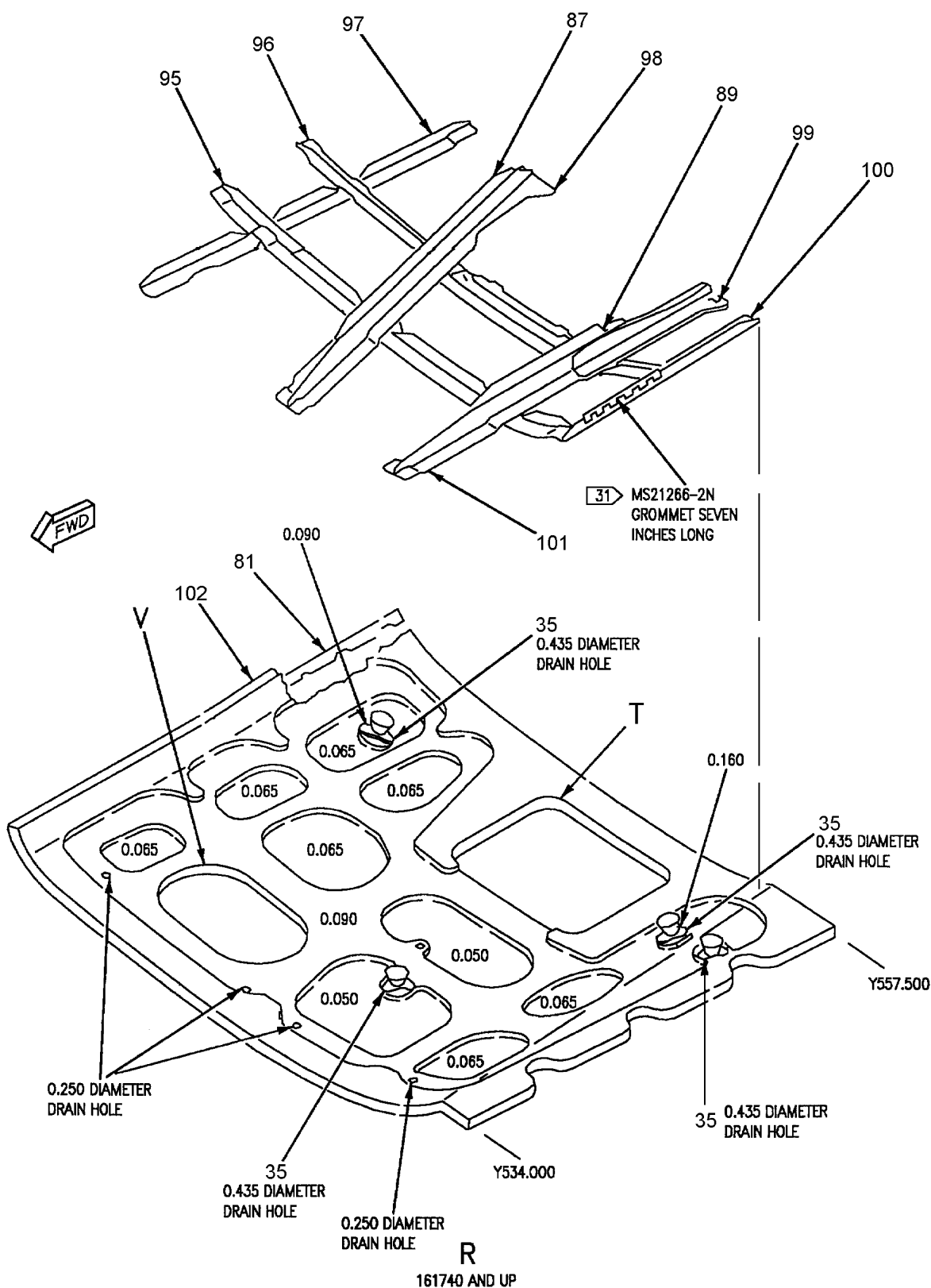
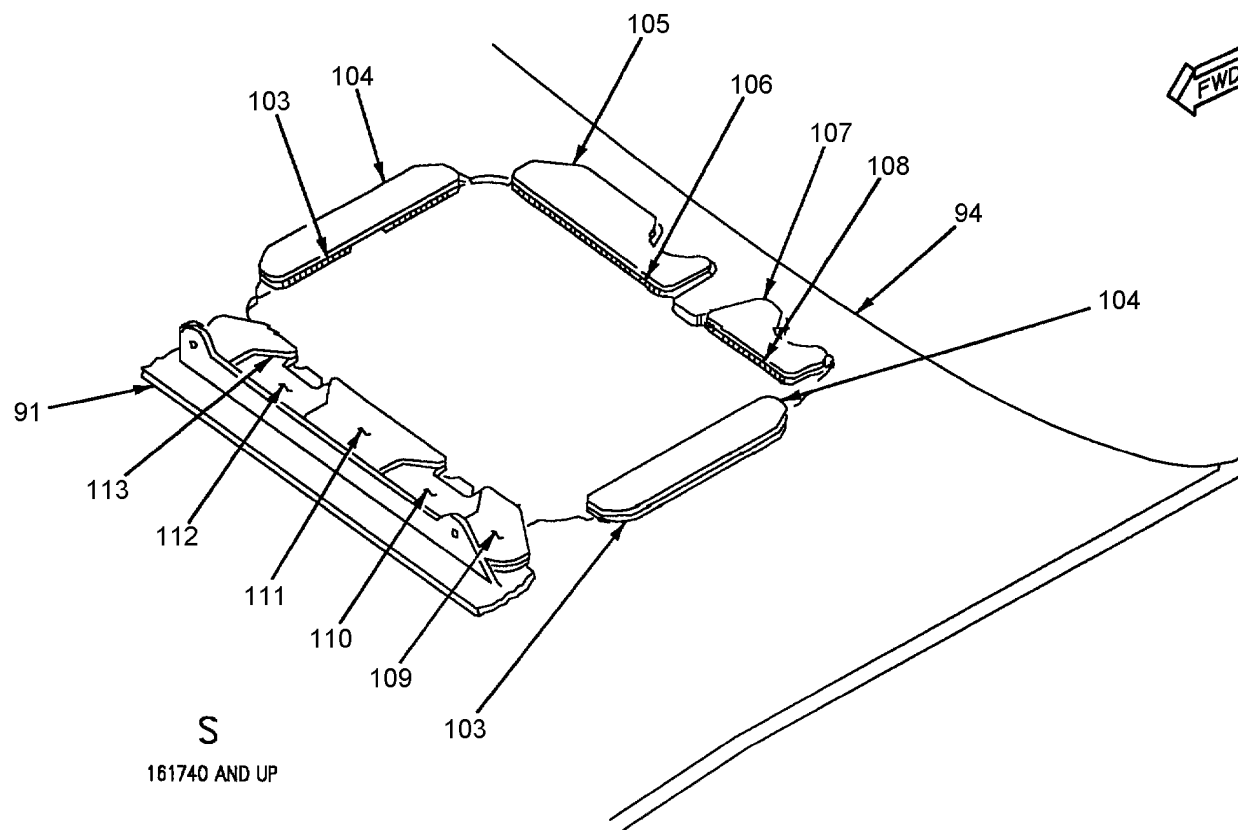
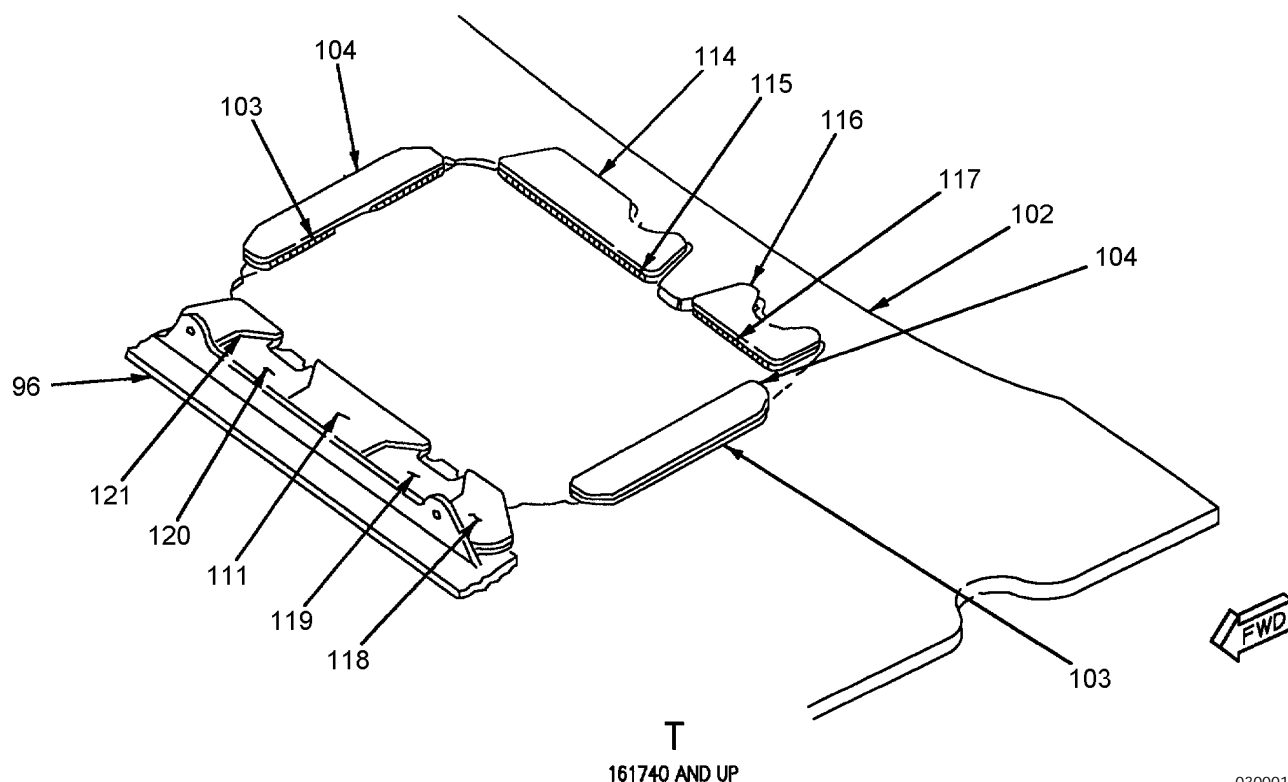


Figure 1. Material Index (Sheet 9)





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161740 AND UP

Figure 1. Material Index (Sheet 11)

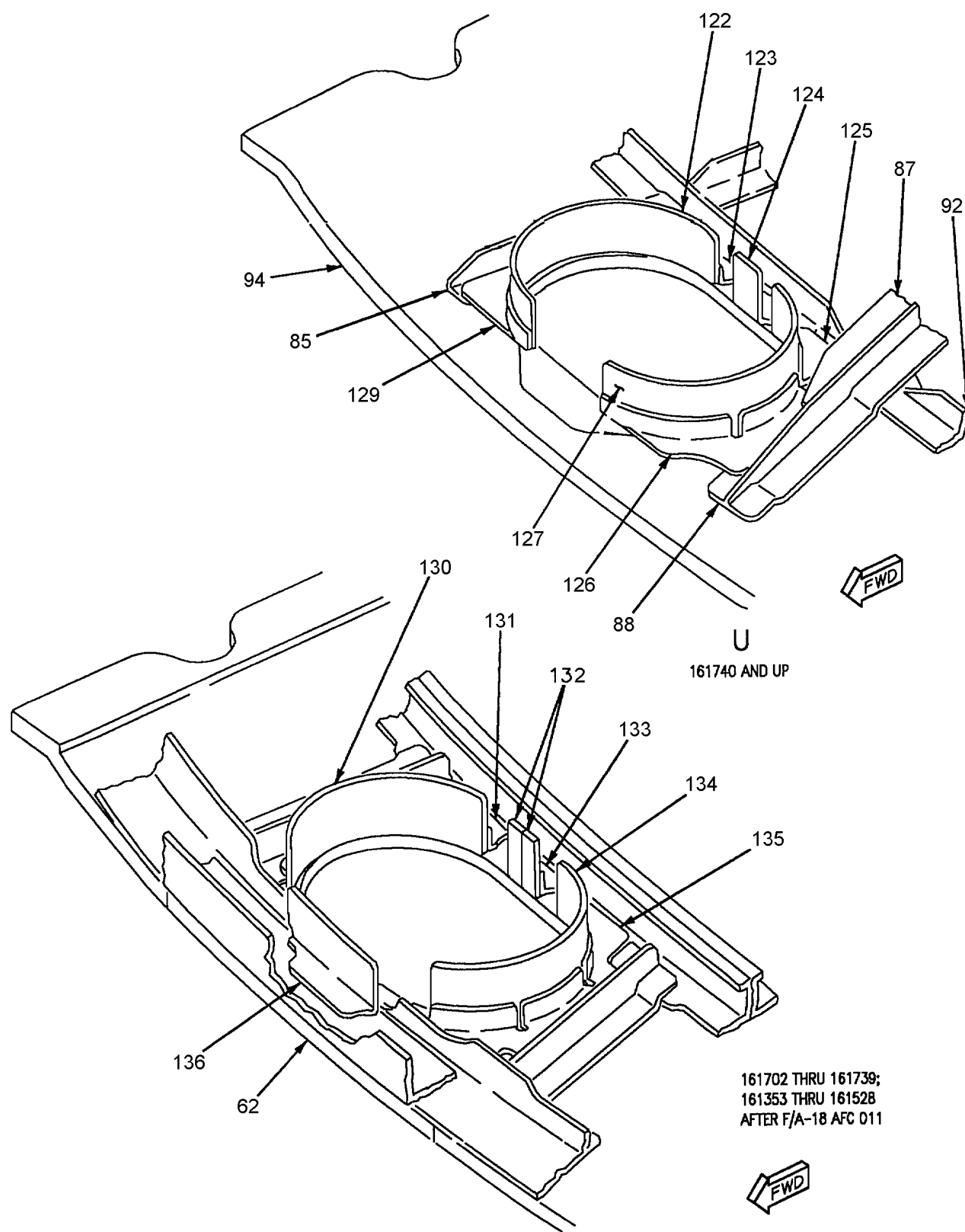


Figure 1. Material Index (Sheet 12)

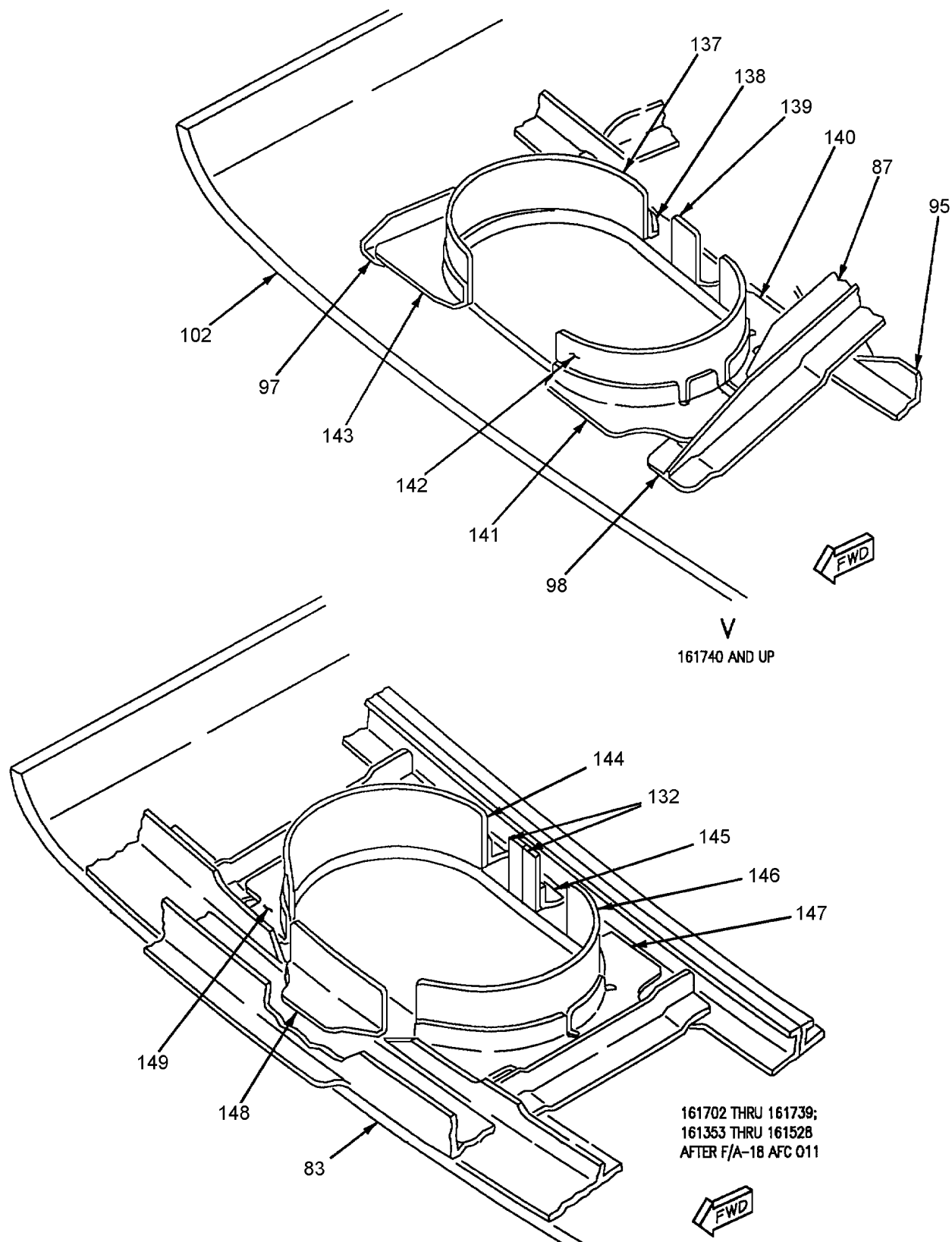


Figure 1. Material Index (Sheet 13)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1	<div>15</div> <div>25</div> <div>29</div>	Cover (Door 50) 74A324655-2001, -2002 74A324655-2005, -2006 74A324655-2009, -2010	1 Sheet	7075-T76 Alclad
2		Cover (Door 116) 74A324675-2002, -2001	0.090 Sheet	7075-T76 Alclad
3		Angle 74A324754-2072, -2071	0.040 Sheet	6061-T62 Al Aly
4		Cap 74A324754-2066, -2065	0.090 Sheet	6061-T6 Al Aly
5	<div>33</div> <div>32</div>	Spacer 74A324656-2001, -2002 74A324656-2005, -2006	0.625 Plate 0.500 Plate	7075-T7351 Al Aly
6		Fairing 74A324754-2094, -2093 74A324754-2101, -2102	<div>35</div> Sheet <div>34</div> Sheet	7075-T76 Al Aly
7		Filler 74A324754-2098, -2097	0.050 Sheet	7075-T76 Al Aly
8	<div>32</div>	Beacon Cradle 810-378-1	-	-
9	<div>3</div> <div>4</div>	Cover (Door 56) 74A324606-9005, -9006 74A324606-2009, -2010	18 Sheet	7075-T76 Alclad
10	<div>4</div>	Plate 74A324611-2001	0.312 Plate	7075-T7351 Al Aly
11	<div>3</div>	Doubler 74A324606-9001, -9002	0.040 Sheet	7075-T6 Alclad
12	<div>3</div>	Plate 74A324606-9003, -9004	0.312 Plate	7075-T7351 Al Aly
13		Window 74A324739-2003	0.150 Sheet	Acrylic Plastic
14	<div>36</div>	Cover (Door 136/174) 74A324752-2001	0.090 Sheet	7075-T76 Alclad
15	<div>37</div>	Skin 74A324752-2009	0.190 Sheet	7075-T76 Alclad
16	<div>38</div> <div>39</div> <div>40</div>	Doubler 74A324752-2003 74A324752-2003 74A324752-2007	0.090 Sheet	7075-T76 Alclad
17		Door 51 74A324673-2005, -2006	0.125 Sheet	7075-T76 Alclad

Figure 1. Material Index (Sheet 14)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
18	<div>12</div> <div>13</div> <div>24</div>	Latch TL18045-101 74A324673-9001 74B320056-101	-	-
19		Hinge 74A324673-2007	0.051 Sheet	5052 Al Aly Half Hard
20		Pin MS20253P2-300	0.089 Wire	302 CRES Cond B
21		Hinge 74A324673-2003	0.051 Sheet	5052 Al Aly Half Hard
22	<div>23</div> <div>41</div>	Cover (Door 52) 74A324554-2003 74A324554-2005	0.313 Plate	7075-T7351 Al Aly
23	<div>37</div>	Cover (Door 52) 74A324649-2031	0.625 Plate	7075-T7351 AL Aly
24		<div>14</div> Doubler 74A324649-2015	0.020 Sheet	7075-T6 Alclad
25		<div>14</div> Wire Mesh 74A324649-2019	3x3 Mesh X 0.047 Dia, Plain Square Weave, 73.8 Per Cent Open Area	304 CRES Cond B
26	<div>23</div> <div>22</div>	<div>14</div> Doubler 74A324649-2017 74A324649-2023	0.020 Sheet	7075-T6 Alclad
27	<div>7</div> <div>10</div> <div>26</div> <div>27</div>	Door 54 74A324618-2009, -2011 74A093126-2011, -2013 74A324618-2013, -2015 74A324618-2017, -2019	0.190 Sheet	7075-T76 Alclad
28		Hinge 74B320052-103	-	-
29	<div>7</div> <div>10</div> <div>16</div>	Instruction Plate 74A540700-2001 74A093126-2017 74A540700-2003	0.025 Sheet	5052-H34 Al Aly
30	<div>10</div>	Bonding Strip 74A093125-2021	0.005 Sheet	Beryllium Copper Aly 172 Cond. H

Figure 1. Material Index (Sheet 15)













Idx No.	Eft	Nomenclature and Part No.	Description	Material
31		Retainer 74A093125-2039	0.040 Sheet	7075-T76 Alclad
32		Latch TL18045-101	-	-
33		Bonding Strip 74A093125-2023	0.005 Sheet	Beryllium Copper Aly 172 Cond. H
34		Retainer 74A093125-2045	0.040 Sheet	7075-T6 Alclad
35	  	Drain 74A324766-2001 74A324766-2003 74A324766-2005	Bar	7075-T7351 Al Aly
36		Angle 74A324610-2157	0.063 Sheet	2024-T72 Alclad
37		Tee 74A324610-2015	1MA160B01-10274 Extr	2024-T62 Al Aly
38		Angle 74A324610-2037	0.050 Sheet	2024-T72 Alclad
39		Angle 74A324610-2035	0.071 Sheet	2024-T72 Alclad
40		Angle 74A324610-2033	0.050 Sheet	2024-T72 Alclad
41	 	Tee 74A324610-2012 74A093125-2016	1MA160B01-10092 Extr 0.050 Sheet	2024-T62 Al Aly 7075-T6 Alclad
42		Channel 74A324610-2021	0.050 Sheet	2024-T72 Alclad
43		Angle 74A324610-2017	0.050 Sheet	2024-T72 Alclad
44	 	Stiffener 74A324610-2153 74A093126-2003	1MA160B01-10446 Extr	2024-T62 Al Aly
45	 	Tee 74A324610-2011 74A093125-2015	1MA160B01-10092 Extr 0.050 Sheet	2024-T62 Al Aly 7075-T6 Alclad
46		Angle 74A324610-2025	0.071 Sheet	2024-T72 Alclad

Figure 1. Material Index (Sheet 16)









Idx No.	Eft	Nomenclature and Part No.	Description	Material
47		Angle 74A324610-2027	0.050 Sheet	2024-T72 Alclad
48		Angle 74A324610-2155	0.063 Sheet	2024-T72 Alclad
49		Angle 74A324610-2029	0.050 Sheet	2024-T72 Alclad
50		Channel 74A324610-2019	0.050 Sheet	2024-T72 Alclad
51		Angle 74A324610-2031	0.050 Sheet	2024-T72 Alclad
52		Stiffener 74A324610-2193 74A093126-2023	1MA160B01-10446 Extr	2024-T62 Al Aly
53		Tee 74A324610-2013	1MA160B01-10274 Extr	2024-T62 Al Aly
54		Channel 74A324610-2191	0.050 Sheet	2024-T72 Alclad
55		Skin (Door 53) 74A324610-2185 74A093126-2001	0.160 Sheet	2024-T72 Alclad
56		Bonding Strip 74A093125-2010	0.005 Sheet	Beryllium Copper Aly 172 Cond H
57		Bonding Strip 74A093125-2013	0.005 Sheet	Beryllium Copper Aly 172 Cond. H
58		Plate 74A093125-2007	0.040 Sheet	7075-T6 Alclad
59		Bonding Strip 74A093125-2011	0.005 Sheet	Beryllium Copper Aly 172 Cond. H
60		Bonding Strip 74A093125-2009	0.005 Sheet	Beryllium Copper Aly 172 Cond. H
61		Angle 74A324610-2189 74A324610-9003 74A324678-2001	0.063 Sheet	2024-T72 Alclad

Figure 1. Material Index (Sheet 17)





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62		Skin 74A324610-2071 74A093126-2025	0.090 Sheet	2024-T72 Alclad
63		Doubler 74A324610-2081	0.063 Sheet	2024-T72 Alclad
64		Angle 74A324610-2163	0.063 Sheet	2024-T72 Alclad
65		Tee 74A324610-2115	1MA160B01-10274 Extr	2024-T62 Al Aly
66		Channel 74A324610-2121	0.050 Sheet	2024-T72 Alclad
67		Channel 74A324610-2195	0.050 Sheet	2024-T72 Alclad
68		Angle 74A324610-2127	0.050 Sheet	2024-T72 Alclad
69		Angle 74A324610-2149	0.050 Sheet	2024-T72 Alclad
70		Channel 74A324610-2117	0.050 Sheet	2024-T72 Alclad
71		Angle 74A324610-2165	0.071 Sheet	2024-T72 Alclad
72		Tee 74A324610-2125 74A093125-2016	1MA160B01-10092 Extr 0.050 Sheet	2024-T62 Al Aly 7075-T6 Alclad
73		Stiffener 74A324610-2161 74A093126-2015	1MA160B01-10446 Extr	2024-T62 Al Aly
74		Tee 74A324610-2111 74A093125-2015	1MA160B01-10092 Extr 0.050 Sheet	2024-T62 Al Aly 7075-T6 Alclad
75		Angle 74A324610-2109	0.063 Sheet	2024-T72 Alclad
76		Angle 74A324610-2129	0.050 Sheet	2024-T72 Alclad
77		Angle 74A324610-2131	0.050 Sheet	2024-T72 Alclad
78		Tee 74A324610-2113	1MA160B01-10274 Extr	2024-T62 Al Aly

Figure 1. Material Index (Sheet 18)







Idx No.	Eft	Nomenclature and Part No.	Description	Material
79		Stiffener 74A324610-2105 74A093126-2019	1MA160B01-10446 Extr	2024-T62 Al Aly
80		Angle 74A324610-2151 74A324610-9007 74A324610-2237	0.050 Sheet	2024-T72 Alclad
81		Angle 74A324610-2190 74A324610-9004 74A324678-2002	0.063 Sheet	2024-T72 Alclad
82		Skin (Door 53) 74A324610-2187 74A093126-2009	0.160 Sheet	2024-T72 Alclad
83		Skin 74A324610-2141 74A093126-2021	0.090 Sheet	2024-T72 Alclad
84		Doubler 74A324610-2143	0.063 Sheet	2024-T81 Alclad
85		Angle 74A324610-2255	1MA100D01-10019 Extr	7075-T76 Al Aly
86		Angle 74A324610-2213	0.063 Sheet	7075-T76 Alclad
87		Cap 74A324610-2339	1MA100D06-10028 Extr	7075-T76511 Al Aly
88		Tee 74A324610-2247	1MA160D01-10283 Extr	7075-T76 Al Aly
89		Cap 74A324610-2207	1MA100D06-10028 Extr	7075-T76511 Al Aly
90		Angle 74A324610-2335 74A324610-9013	1MA100D01-10123	7075-6 Al Aly
91		Former 74A324610-2253	1MA160D01-10311 Extr	7075-T76 Al Aly
92		Former 74A324610-2251	1MA160D01-10311 Extr	7075-T76 Al Aly
93		Tee 74A324610-2249	1MA160D01-10283 Extr	7075-T76 Al Aly

Figure 1. Material Index (Sheet 19)



Idx No.	Eft	Nomenclature and Part No.	Description	Material
94		Skin (Door 53) 74A324610-2245	Sheet	2024-T72 Alclad
95		Former 74A324610-2263	1MA160D01-10311 Extr	7075-T76 Al Aly
96		Former 74A324610-2265	1MA160D01-10311 Extr	7075-T76 Al Aly
97		Angle 74A324610-2267	1MA100D01-10019 Extr	7075-T76 Al Aly
98		Tee 74A324610-2259 74A324610-2356	1MA160D01-10286 Extr	7075-T76 Al Aly
99		Angle 74A324610-2337 74A324610-9015	1MA100D01-10123 Extr	7075-6 Al Aly
100		Angle 74A324610-2231	0.063 Sheet	7075-T76 Alclad
101		Tee 74A324610-2261	1MA160D01-10286 Extr	7075-T76 Al Aly
102		Skin (Door 53) 74A324610-2257	Sheet	2024-T72 Alclad
103		Bonding Strip 74A324610-2289	Made from ST9M622-3	Beryllium Copper Aly 172 Cond. H
104		Retainer 74A324610-2279	0.040 Sheet	7075-T76 Alclad
105		Retainer 74A324610-2311	0.040 Sheet	7075-T6 Alclad
106		Bonding Strip 74A324610-2299	Made from ST9M622-2	Beryllium Copper Aly 172 Cond. H
107		Retainer 74A324610-2309	0.040 Sheet	7075-T6 Alclad
108		Bonding Strip 74A324610-2295	Made from ST9M622-2	Beryllium Copper Aly 172 Cond. H
109		Retainer 74A324610-2333	0.040 Sheet	7075-T6 Alclad

Figure 1. Material Index (Sheet 20)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
110		Bonding Strip 74A324610-2331	Made from ST9M622-4	Beryllium Copper Aly 172 Cond. H
111		Retainer 74A324610-2275	0.040 Sheet	7075-T6 Alclad
112		Bonding Strip 74A324610-2297	Made from ST9M622-4	Beryllium Copper Aly 172 Cond. H
113		Retainer 74A324610-2313	0.040 Sheet	7075-T6 Alclad
114		Retainer 74A324610-2281	0.040 Sheet	7075-T6 Alclad
115		Bonding Strip 74A324610-2293	Made from ST9M622-2	Beryllium Copper Aly 172 Cond. H
116		Retainer 74A324610-2269	0.040 Sheet	7075-T6 Alclad
117		Bonding Strip 74A324610-2283	Made from ST9M622-2	Beryllium Copper Aly 172 Cond. H
118		Retainer 74A324610-2271	0.040 Sheet	7075-T6 Alclad
119		Bonding Strip 74A324610-2285	Made from ST9M622-4	Beryllium Copper Aly 172 Cond. H
120		Bonding Strip 74A324610-2287	Made from ST9M622-4	Beryllium Copper Aly 172 Cond. H
121		Retainer 74A324610-2273	0.040 Sheet	7075-T6 Alclad
122		Rub Strip 74A324610-2317	0.040 Sheet	7075-T6 Al Aly
123		Angle 74A324610-2347	0.063 Sheet	7075-T6 Al Aly
124		Angle 74A324610-2277	0.063 Sheet	7075-T6 Alclad
125		Angle 74A324610-2291	0.063 Sheet	7075-T6 Alclad

Figure 1. Material Index (Sheet 21)



Idx No.	Eft	Nomenclature and Part No.	Description	Material
126		Angle 74A324610-2353	0.063 Sheet	7075-T6 Alclad
127		Rub Strip 74A324610-2321	0.040 Sheet	7075-T6 Bare
128		Deleted		
129		Angle 74A324610-2345	0.063 Sheet	7075-T6 Alclad
130		Rub Strip 74A093125-2099	0.040 Sheet	7075-T6 Bare
131		Angle 74A093125-2097	0.063 Sheet	7075-T6 Alclad
132		Rub Strip  74A093125-9005	0.040 Sheet	7075-T6 Bare
133		Angle 74A093125-9009	0.063 Sheet	7075-T6 Alclad
134		Rub Strip 74A093125-2095	0.040 Sheet	7075-T6 Bare
135		Angle 74A093125-2093	0.063 Sheet	7075-T6 Alclad
136		Angle 74A093125-2053	0.063 Sheet	7075-T6 Bare
137		Rub Strip 74A324610-2329	0.040 Sheet	7075-T6 Al Aly
138		Angle 74A324610-2325	0.063 Sheet	7075-T6 Alclad
139		Angle 74A324610-2301	0.063 Sheet	7075-T6 Al Aly
140		Angle 74A324610-2303	0.063 Sheet	7075-T6 Al Aly
141		Angle 74A324610-2351	0.063 Sheet	7075-T6 Alclad
142		Rub Strip 74A324610-2327	0.040 Sheet	7075-T6 Al Aly
143		Angle 74A324610-2323	0.063 Sheet	7075-T6 Alclad
144		Rub Strip 74A093125-2083	0.040 Sheet	77075-T6 Bare

Figure 1. Material Index (Sheet 22)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
145		Angle  74A093125-9011	0.063 Sheet	7075-T6 Alclad
146		Rub Strip 74A093125-2081	0.040 Sheet	7075-T6 Alclad
147		Angle 74A093125-2079	0.063 Sheet	7075-T6 Alclad
148		Angle 74A093125-2035	0.063 Sheet	7075-T6 Bare
149		Angle 74A093125-2085	0.063 Sheet	7075-T6 Alclad
150		Spacer 74A324656-2003	0.25 Plate	7075-T351 Al Aly

LEGEND
































-  Land is 0.090 and bay is 0.030.
-  Land is 0.080 and bays are 0.045.
-  161353 THRU 161360.
-  161361 AND UP.
-  161353 THRU 161361.
-  161362 THRU 161739.
-  161353 THRU 161528 BEFORE F/A-18 IAFC 011.
-  161353 THRU 161702.
-  161703 THRU 161719.
-  161702 THRU 161739; 161353 THRU 161528 AFTER F/A-18 IAFC 011.
-  161720 THRU 161739.
-  161353 THRU 161702, 161704.
-  161703, 161705 THRU 161952.
-  Part of 74A324649-2013 or -2021 screen assembly.
-  161353 THRU 161741.
-  161740 AND UP.
-  Two required.
-  Land is 0.090 and bay is 0.050.
-  161353 THRU 161704.
-  161740 THRU 161956.
-  161957 AND UP.
-  161937 AND UP.
-  161353 THRU 161936.
-  161953 AND UP.
-  161742 THRU 161928.
-  161740 THRU 161968.
-  161969 AND UP.
-  161742 THRU 161987.
-  161929 AND UP.
-  162392 AND UP.
-  161940 AND UP; ALSO 161353 THRU 161939 AFTER F/A-18 AFC 064.

Figure 1. Material Index (Sheet 23)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
32		163092 AND UP.		
33		161353 THRU 163091.		
34		Land is 0.040 and bays are 0.020.		
35		Land is 0.071 and bays are 0.020.		
36		161353 THRU 163118.		
37		163119 AND UP.		
38		161353 THRU 162453.		
39		162454 THRU 163118 AT Y522.000 (DOOR 174).		
40		162454 THRU 163118 AT Y530.000 (DOOR 136).		
41		161937 THRU 163118.		

Figure 1. Material Index (Sheet 24)

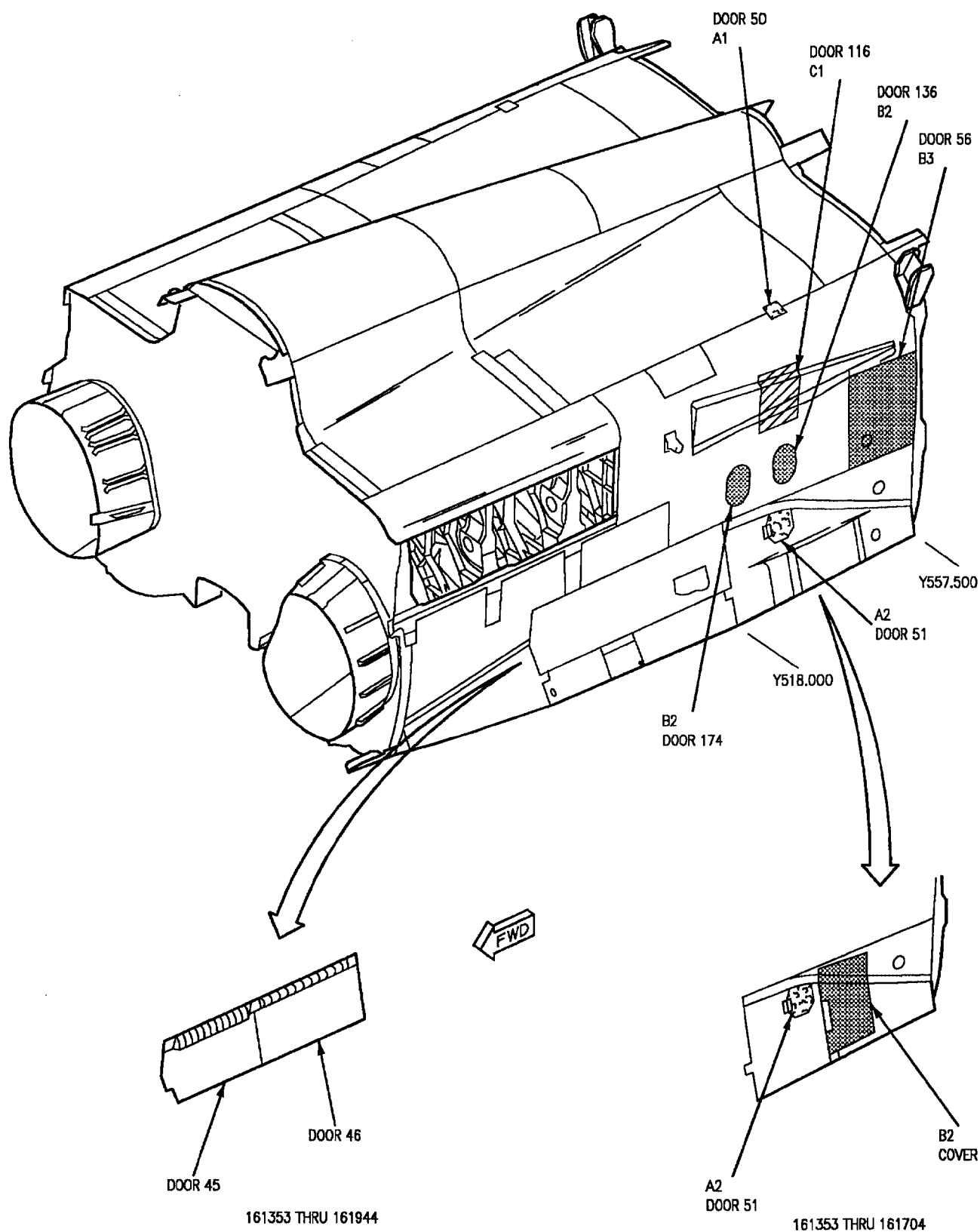


Figure 2. Repair Zones (Sheet 1)

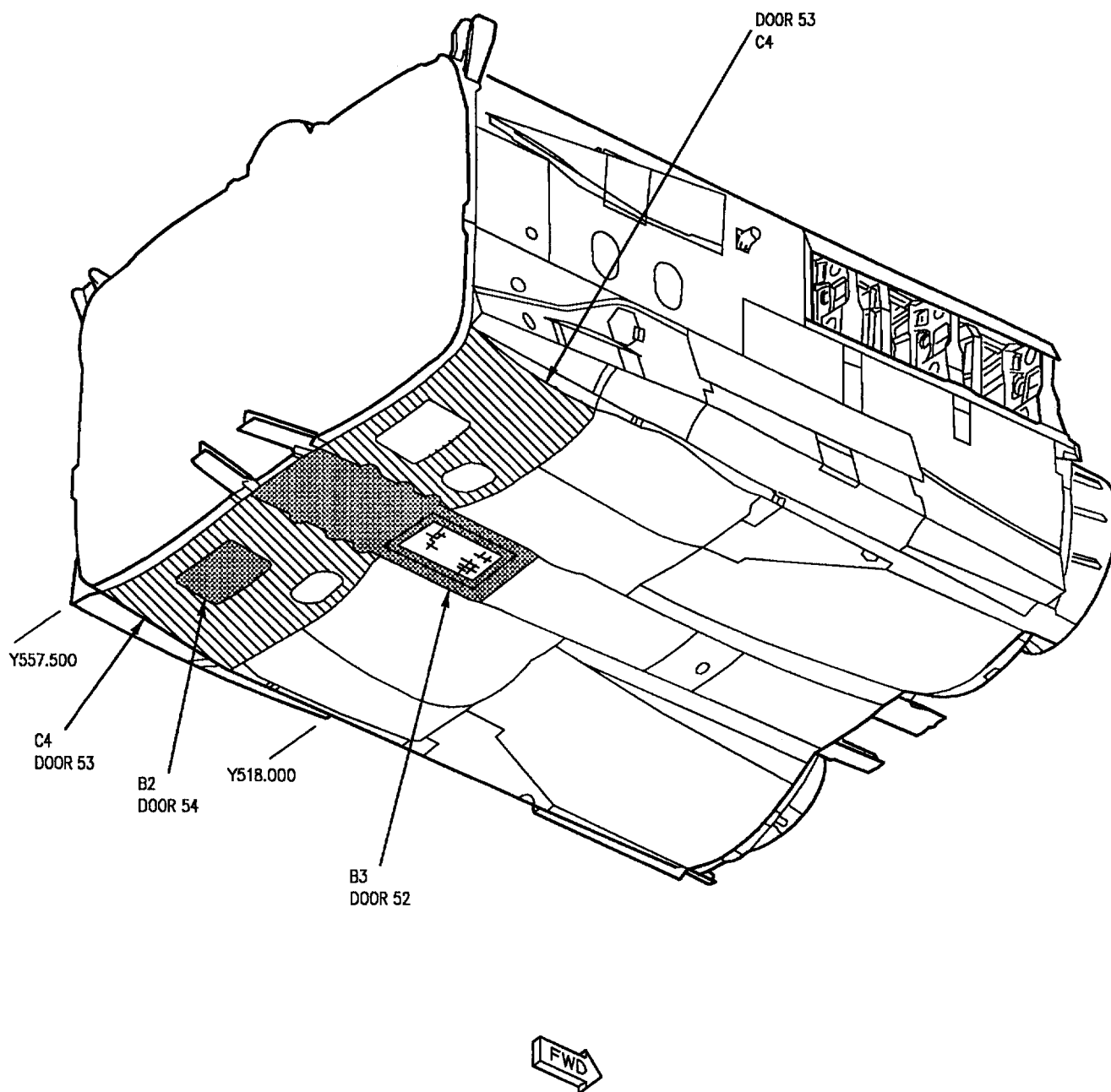


Figure 2. Repair Zones (Sheet 2)

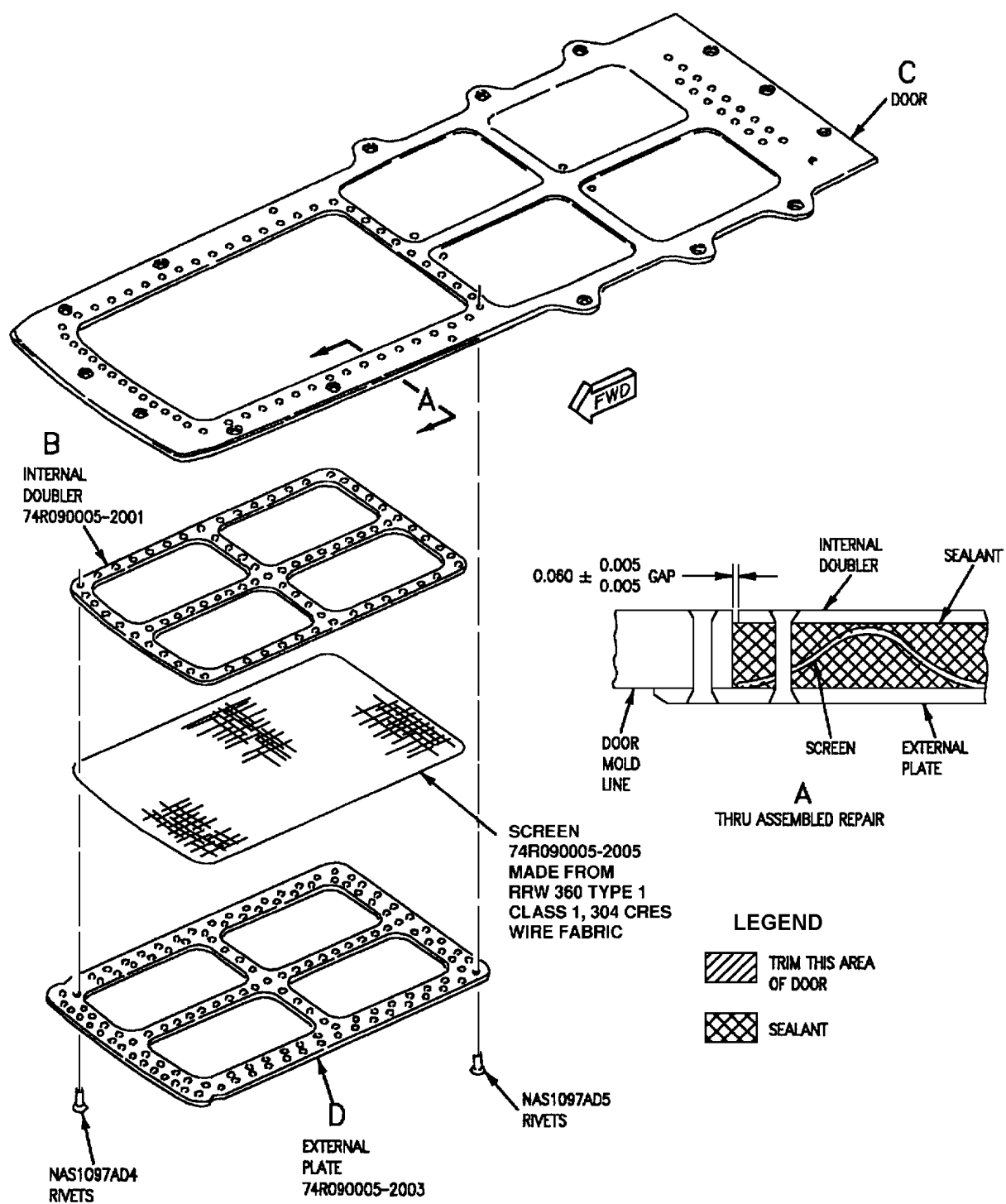
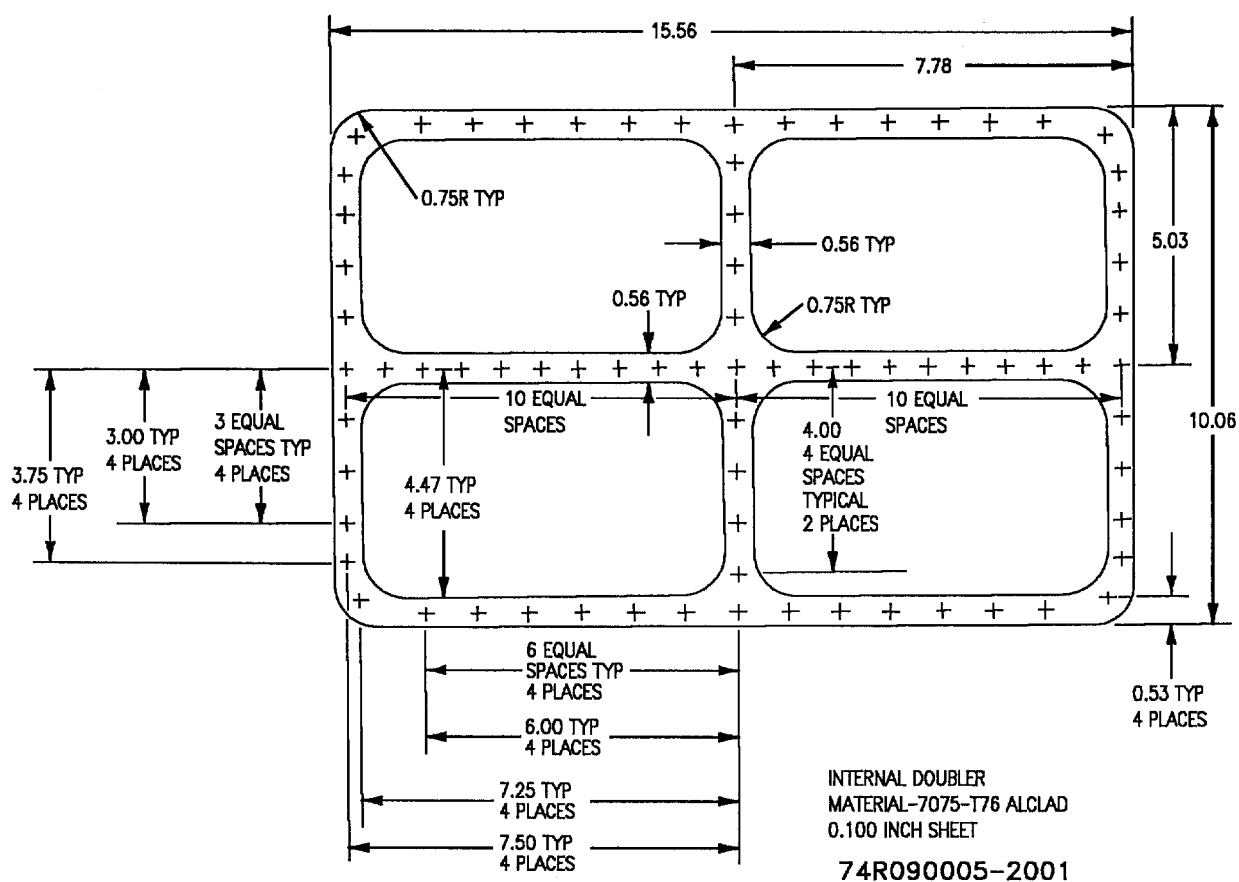


Figure 3. Door 52 Screen Repair (Sheet 1)



B

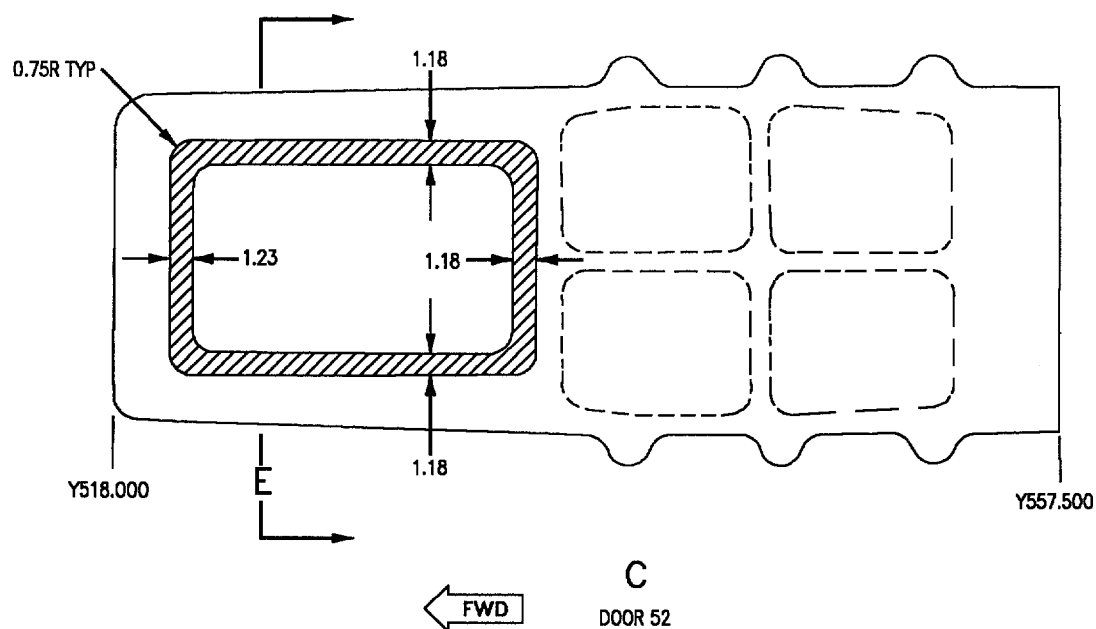
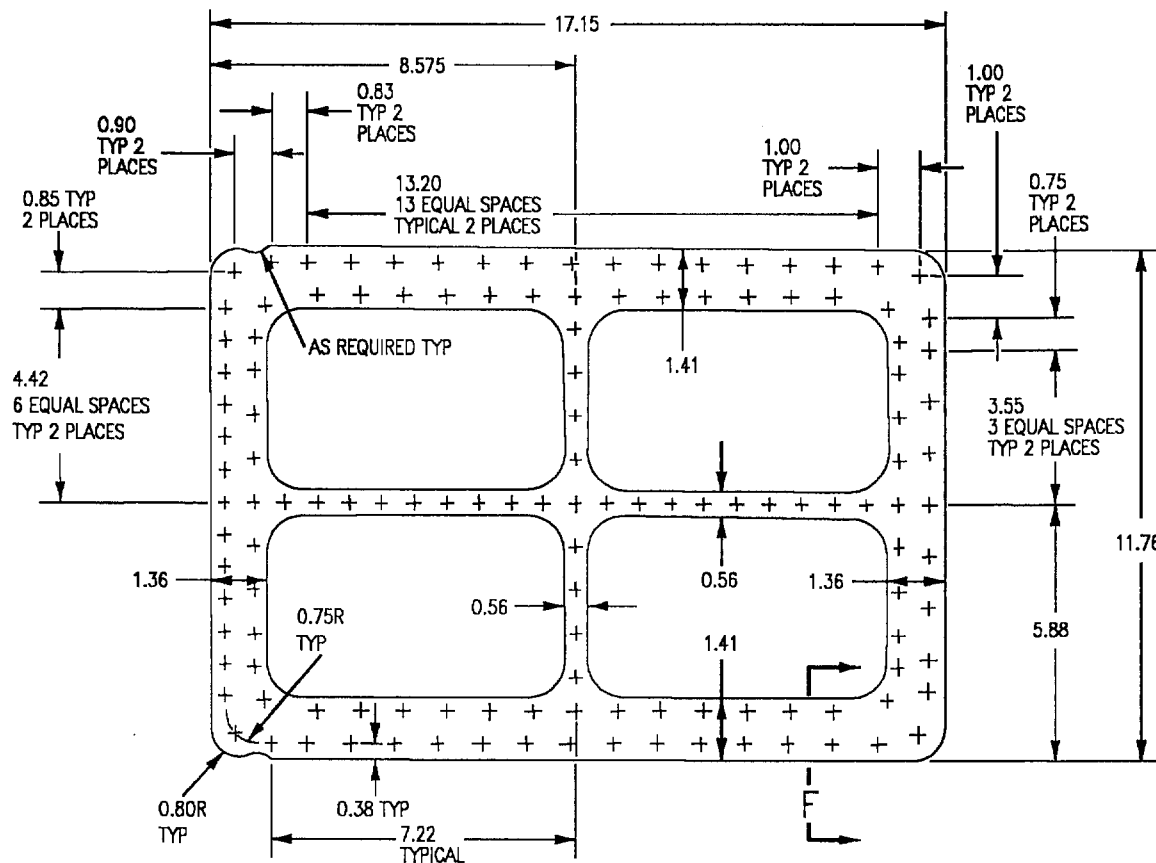


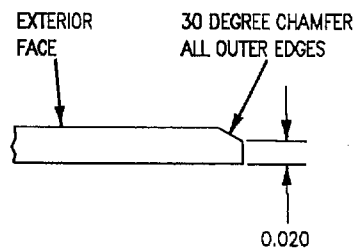
Figure 3. Door 52 Screen Repair (Sheet 2)



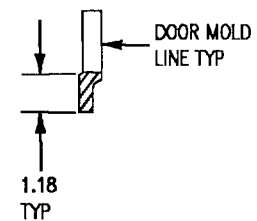
EXTERNAL PLATE
MATERIAL-7075-T6 ALCLAD
0.063 INCH SHEET

74R090005-2003

D



F



E

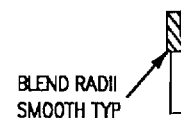


Figure 3. Door 52 Screen Repair (Sheet 3)

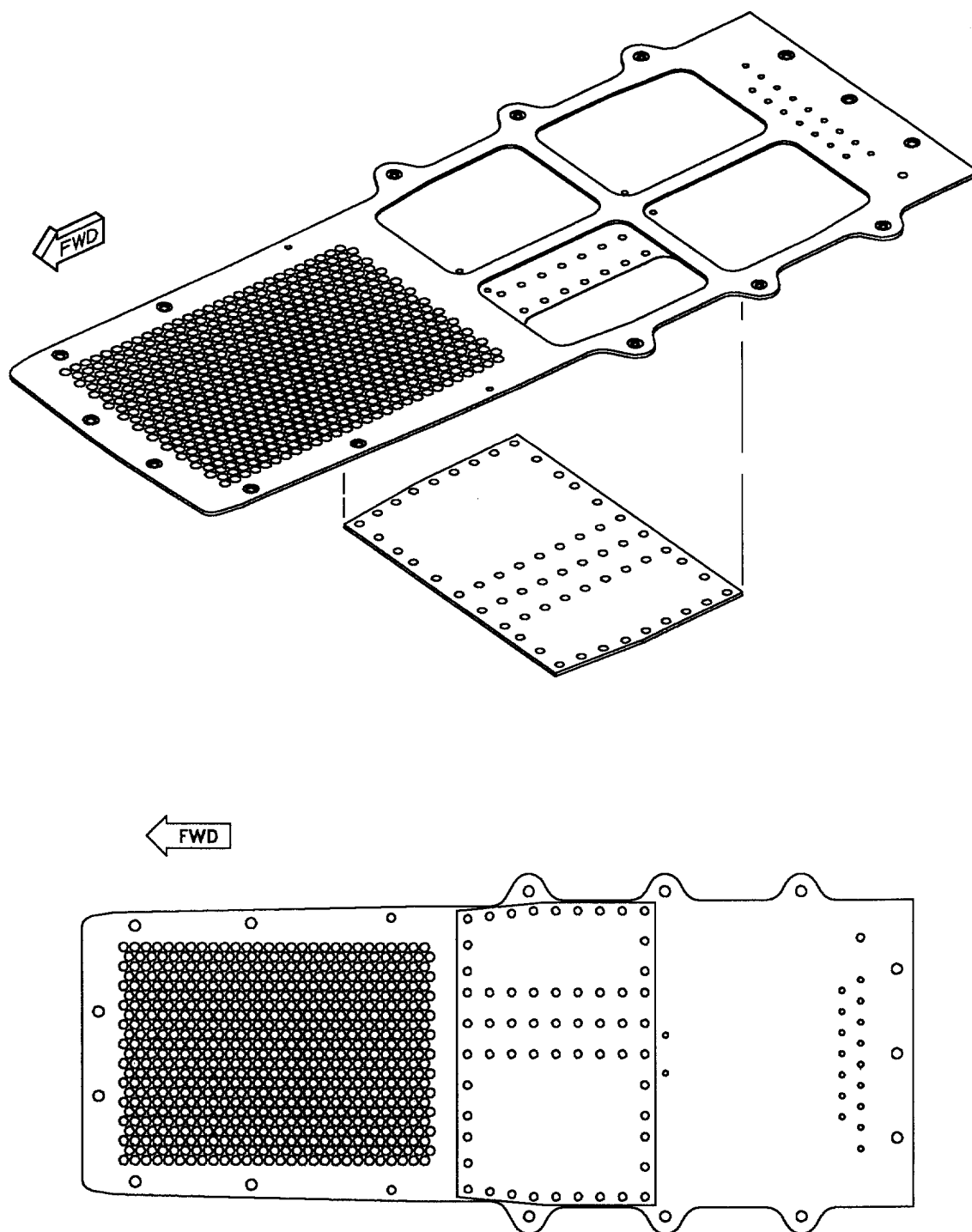


Figure 4. Door 52 Crack Repair

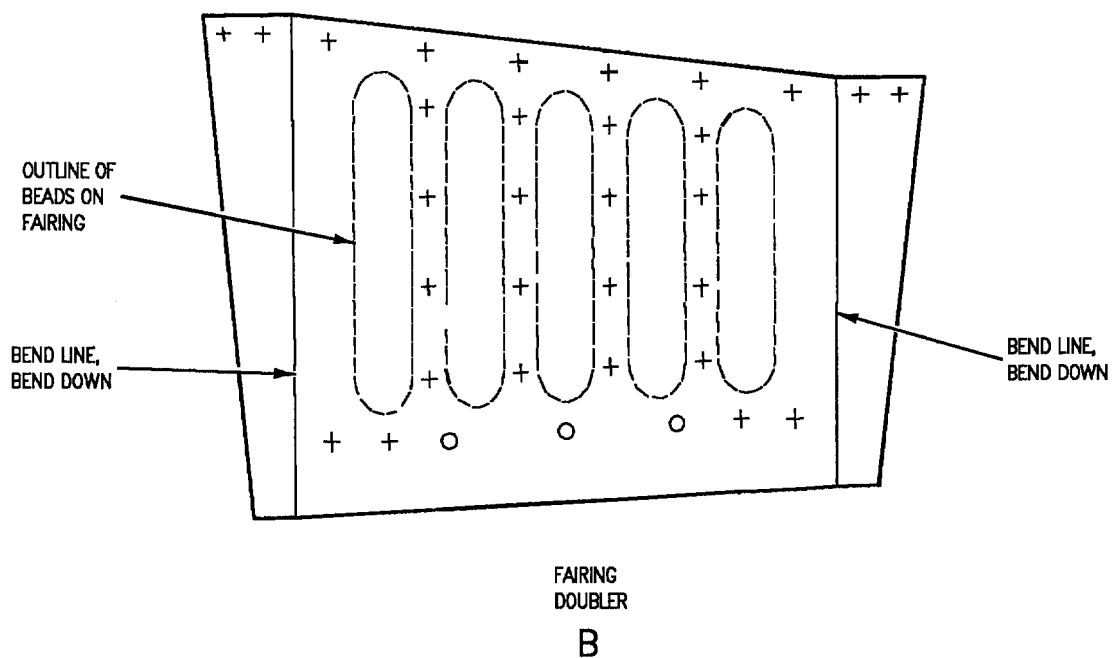
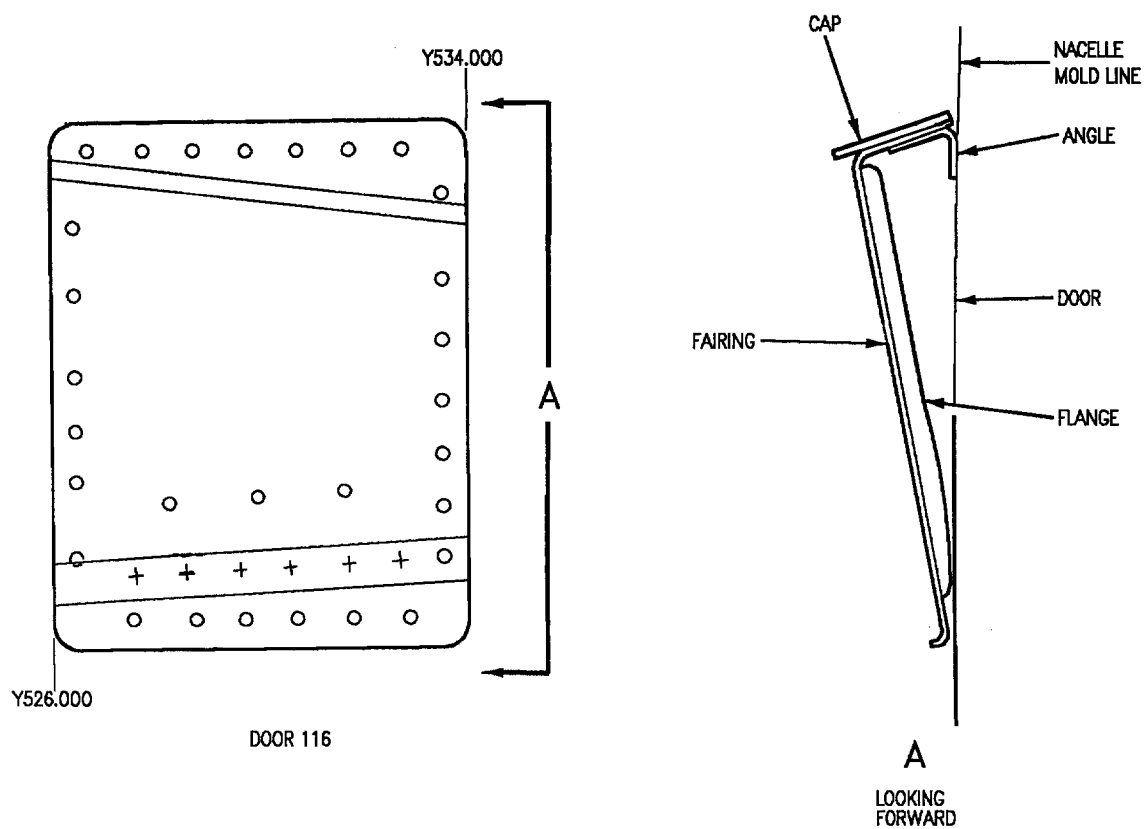


Figure 5. Door 116 Fairing Repair, Wing Trailing Edge to Fuselage (Sheet 1)

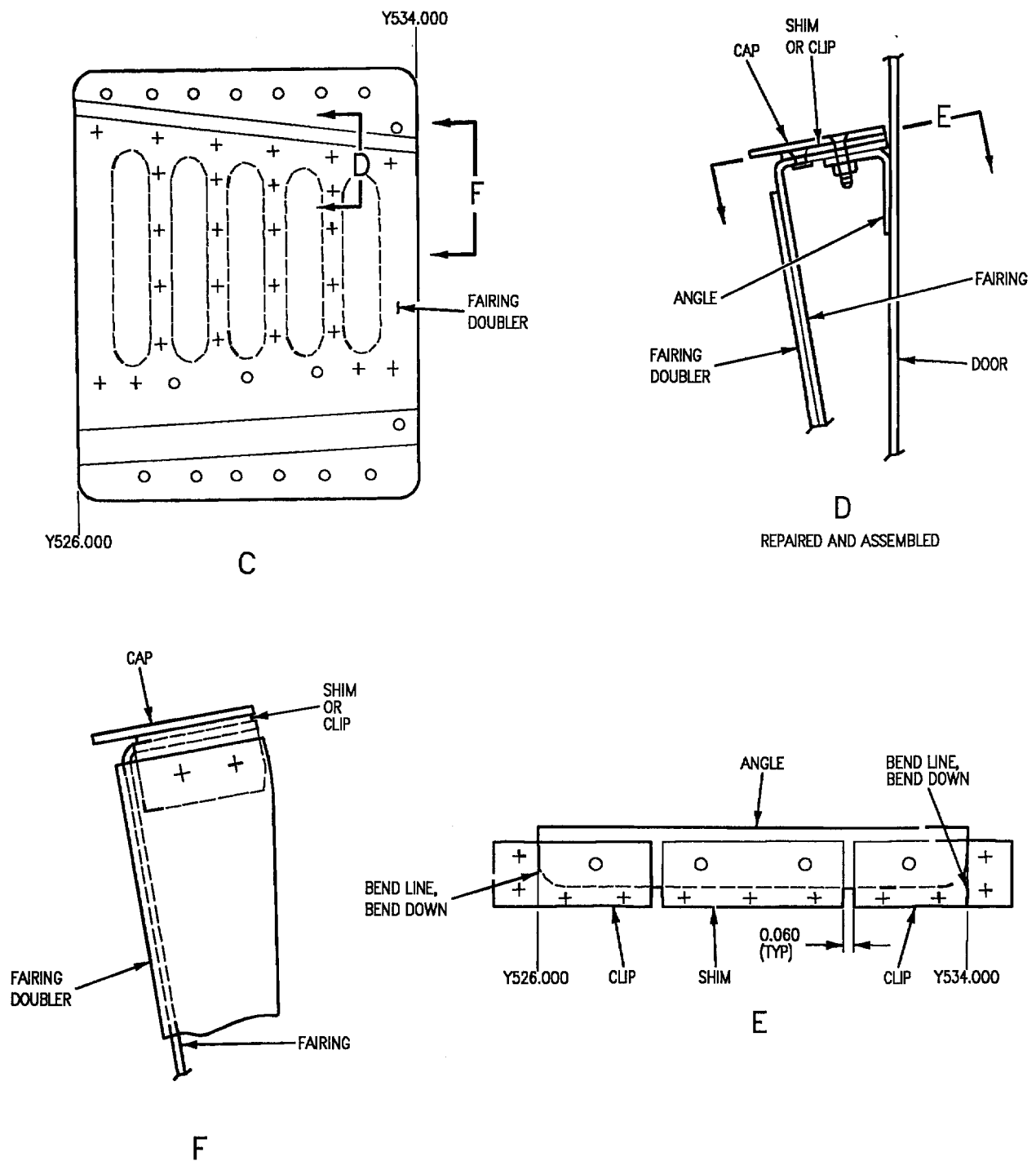


Figure 5. Door 116 Fairing Repair, Wing Trailing Edge to Fuselage (Sheet 2)

ORGANIZATIONAL MAINTENANCE

STRUCTURE REPAIR

AFT CENTER FUSELAGE ALUMINUM COVERS AND DOORS, Y518.000
THROUGH Y557.500, REPLACEMENTS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Form In Place Sealing	WP010 00
Hydraulic System	A1-F18AC-450-300
Fluid Level Indicators and Flexible Cable	WP010 00
Structure Illustrated Parts Breakdown - Center Fuselage	A1-F18AC-SRM-430
Fuselage Section Segment - Ctr, Y453.000 to Y557.500	FIG 010 00
Door, Access-Installation of, Y534 to Y557.5	FIG 011 00
Structure Repair, General Information	A1-F18AC-SRM-200
Gang Channel Identification and Repair	WP004 05
Structural Hardware	NAVAIR 01-1A-8

Alphabetical Index

Subject	Page No.
Replacements	2
Latch Adjustment	2

Record of Applicable Technical Directives

None

1. REPLACEMENTS.

2. Fastener attaching hardware is shown for covers below:

a. Cover, door 50, is interchangeable. Fastener attaching hardware is shown on figure 1. For fasteners (A1-F18AC-SRM-430, FIG 010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets, attaching plate nuts, not shown (A1-F18AC-SRM-200, WP004 05).

b. Cover, door 51, is interchangeable. Fastener attaching hardware is shown on figure 2. Adjust latch per paragraph 3. For form in place sealing (A1-F18AC-SRM-500, WP010 00).

c. Cover, door 52, is interchangeable. Fastener attaching hardware is shown on figure 3. For flare lock fasteners (A1-F18AC-SRM-430, FIG 010 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching receptacles and plate nut (A1-F18AC-SRM-200, WP004 05).

d. Cover door 53, 161353 THRU 161740 is replaceable and requires trimming and drilling, 161741 AND UP is interchangeable. Fastener attaching hardware is shown on figure 4. For flare lock fasteners (A1-F18AC-SRM-430, FIG 011 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching receptacles (A1-F18AC-SRM-200, WP004 05).

e. Cover, door 56, is interchangeable. Fastener attaching hardware is shown on figure 5. For fasteners (A1-F18AC-SRM-430, FIG 010 00). For clip nuts around window (A1-F18AC-450-300, WP010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00).

f. Cover, door 116, is interchangeable. Fastener attaching hardware is shown on figure 6. For fasteners (A1-F18AC-SRM-430, FIG 010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching plate nuts and gang channels (A1-F18AC-SRM-200, WP004 05).

g. Cover, door 136, is interchangeable. Fastener attaching hardware is shown on figure 7. For fasteners

(A1-F18AC-SRM-430, FIG 010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05).

h. Cover, door 174, is interchangeable. Fastener attaching hardware is shown on figure 8. For fasteners (A1-F18AC-SRM-430, FIG 010 00). For form in place sealing (A1-F18AC-SRM-500, WP010 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05).

i. Cover, door 54, is interchangeable. Fastener attaching hardware is shown on figure 9. Adjust latch per paragraph 3. For form in place sealing (A1-F18AC-SRM-500, WP010 00).

j. Cap and closeout, 74A324754. Cap and closeout, 74A324754 is interchangeable. Fastener attaching hardware is shown in figure 10. Cap and closeout, 74A324754 is attached to door 116, refer to step f. For replacement rivets attaching gang channel (A1-F18AC-SRM-200, WP004 05).

3. LATCH ADJUSTMENT. See figure 2 or 9.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Tester, Spring Resiliency	DPP-50

Materials Required

Nomenclature	Specification or Part Number
Thread Lock	22221

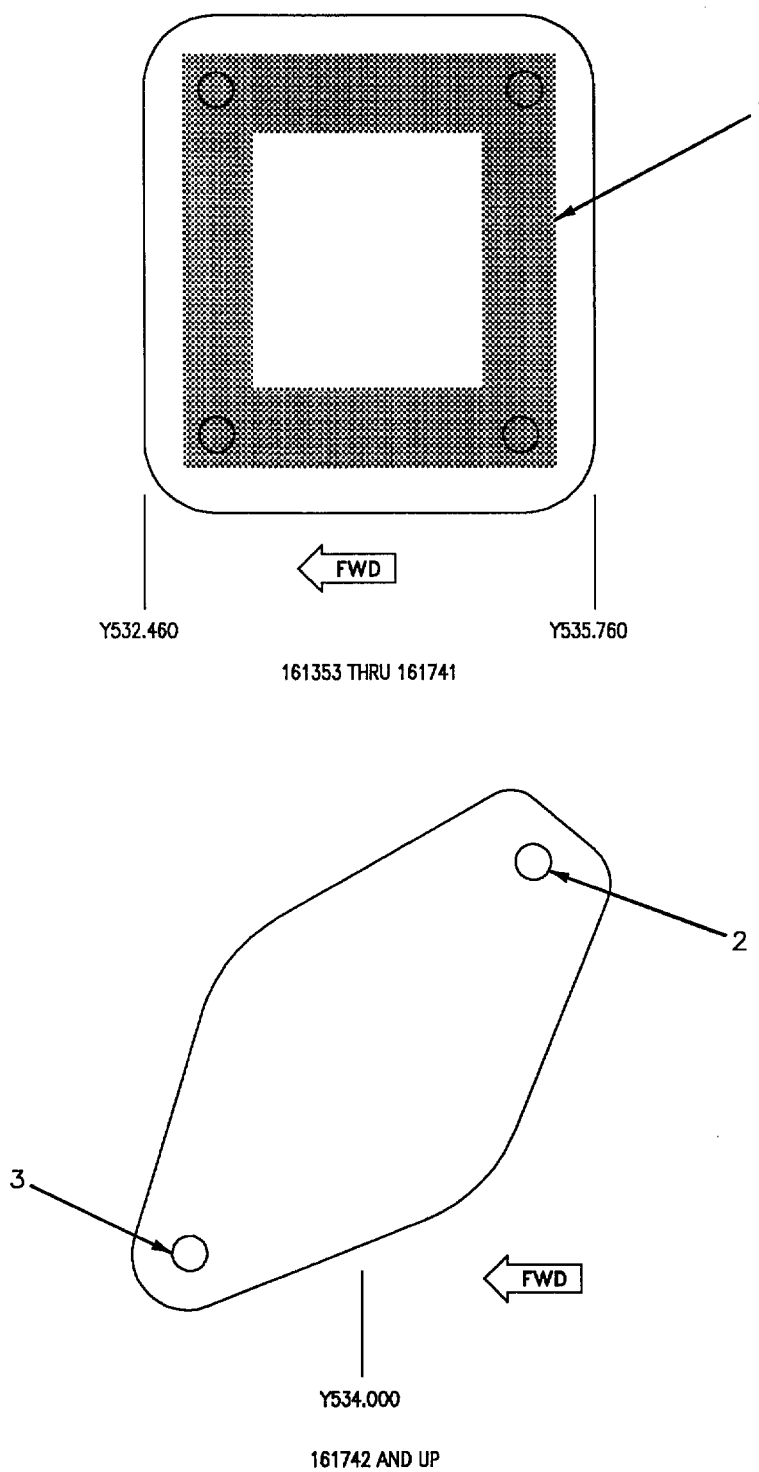
a. Retract adjusting screw, and apply thread lock to threads.

b. Using adjusting screw, adjust latch to dimension shown (See figure 2 or 9), within 20 minutes.

c. Readjust adjusting screw until pressure of 10 to 15 pounds to unlatch door is met.

d. Use tester to check latch opening pressure.

e. Let set for 24 hours.



30010101

Figure 1. Cover (Door 50) Replacement (Sheet 1)





















Idx No.	Eft		Nomenclature	Part Number
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2	  	 	Plate Nut Filler Plate Nut	F50406-4 74A324654-2001 NAS1473A4
3	   	 	Plate Nut  Filler Plate Nut  Filler	F49249E4-2 74A324654-2003, -2004 F49069N3-4 74A324654-2007, -2008
<p style="text-align: center;">LEGEND</p> <p> Hole diameter in cover is 0.375 +0.006 -0.000.</p> <p> Hole diameter in cover is 0.257 +0.006 -0.000 and 0.312 +0.007 -0.000 in structure.</p> <p> 161742 THRU 161928.</p> <p> 161924 AND UP.</p> <p> Attached with PLT1058-6 rivet. Determine length on installation.</p> <p> 161929 AND UP.</p>				

Figure 1. Cover (Door 50) Replacement (Sheet 2)

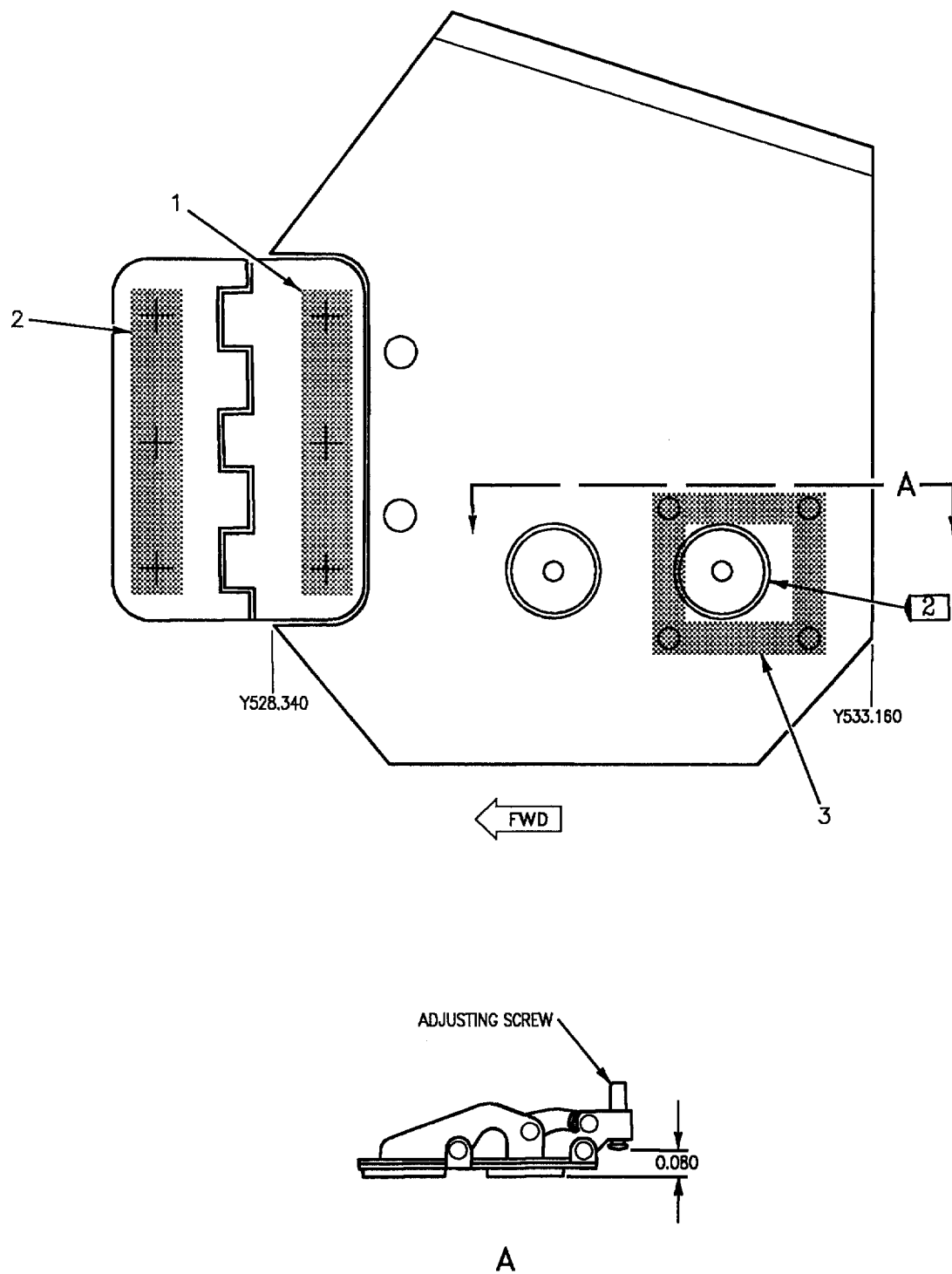


Figure 2. Cover (Door 51) Replacement (Sheet 1)













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2	 	 	Rivet Rivet	NAS1399D5-4 CR3212-5-3
3			Rivet	MS20426AD4
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.159 +0.007 -0.000.</p> <p> For latch adjustment see paragraph 3.</p> <p> Hole diameter is 0.128 + 0.006 -0.000.</p> <p> Hole diameter is 0.160 +0.004 -0.000.</p> <p> 161353 THRU 161741.</p> <p> 161742 AND UP.</p>				

Figure 2. Cover (Door 51) Replacement (Sheet 2)

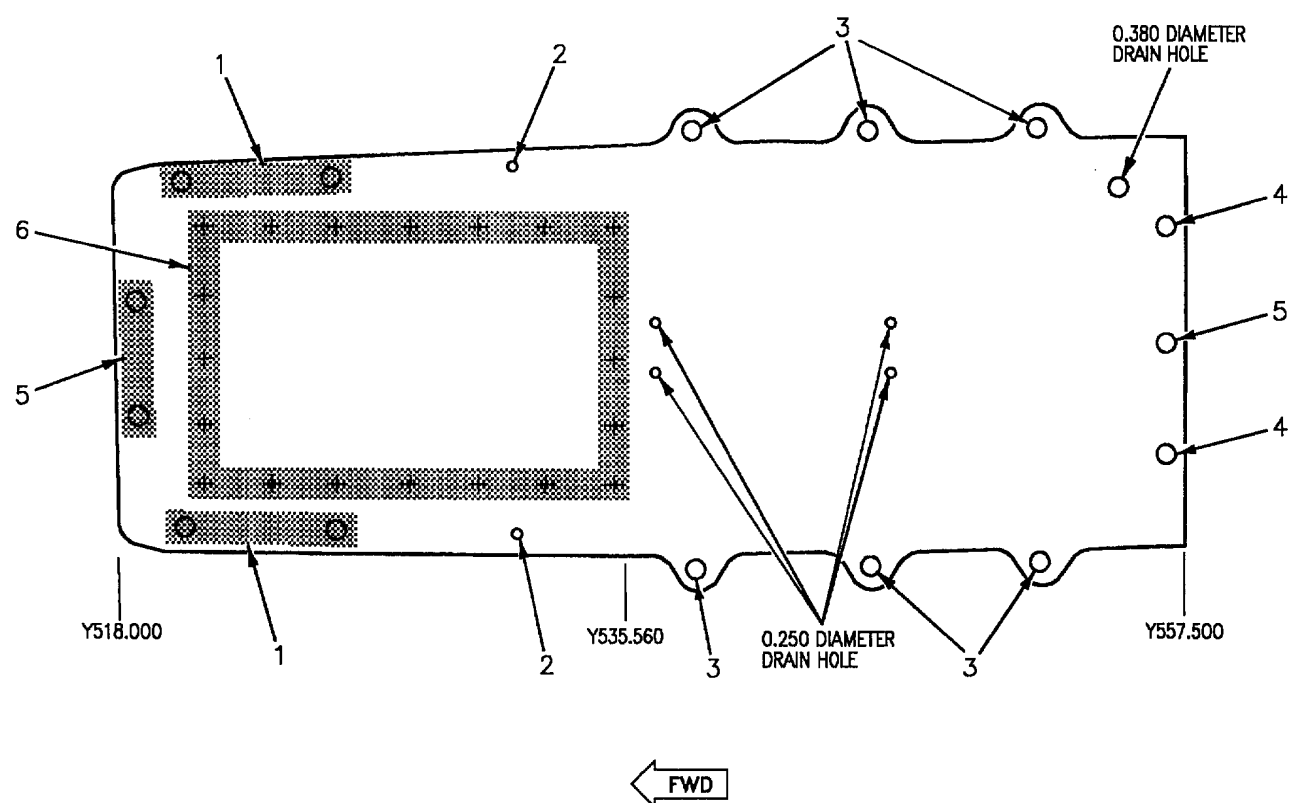


Figure 3. Cover (Door 52) Replacement (Sheet 1)










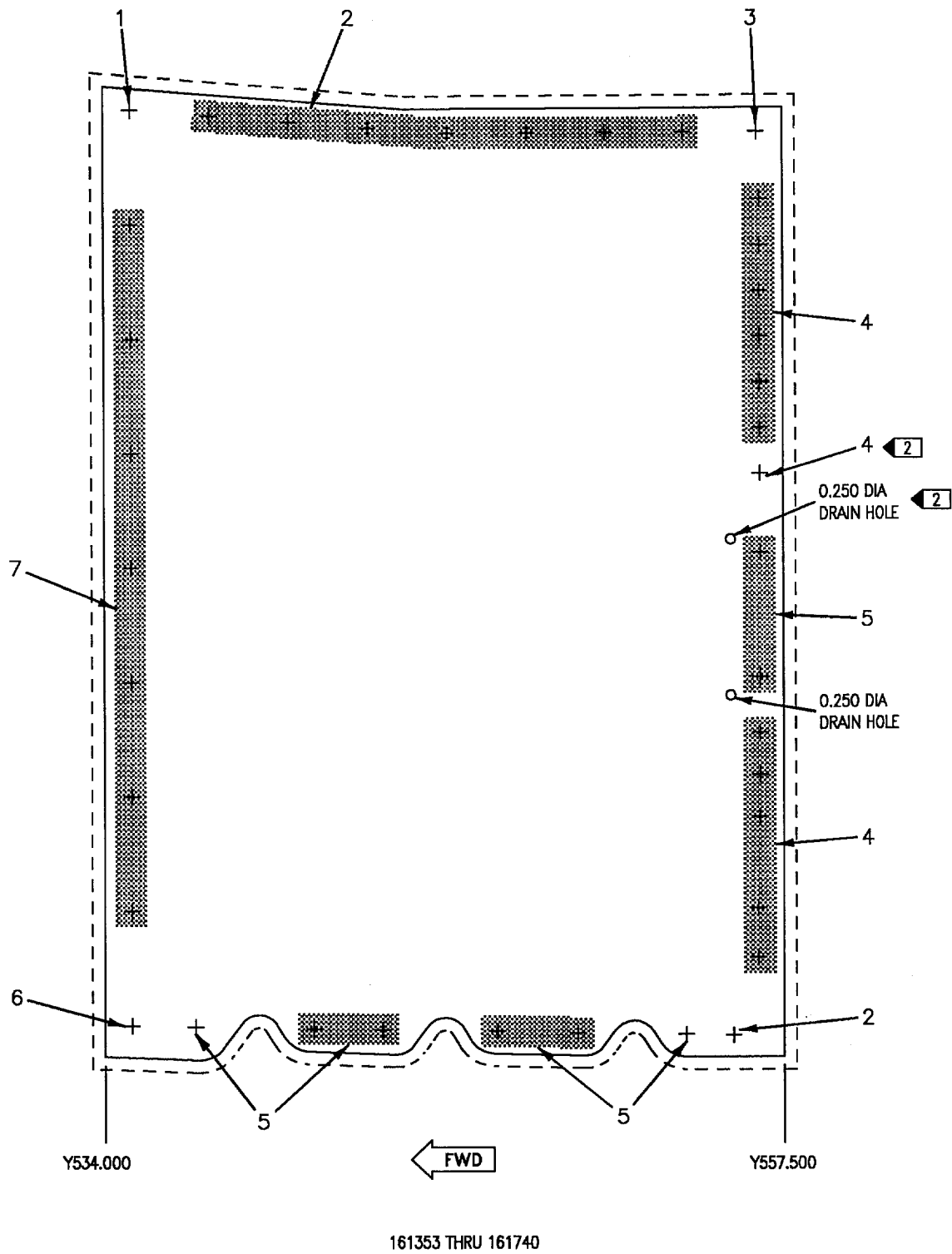
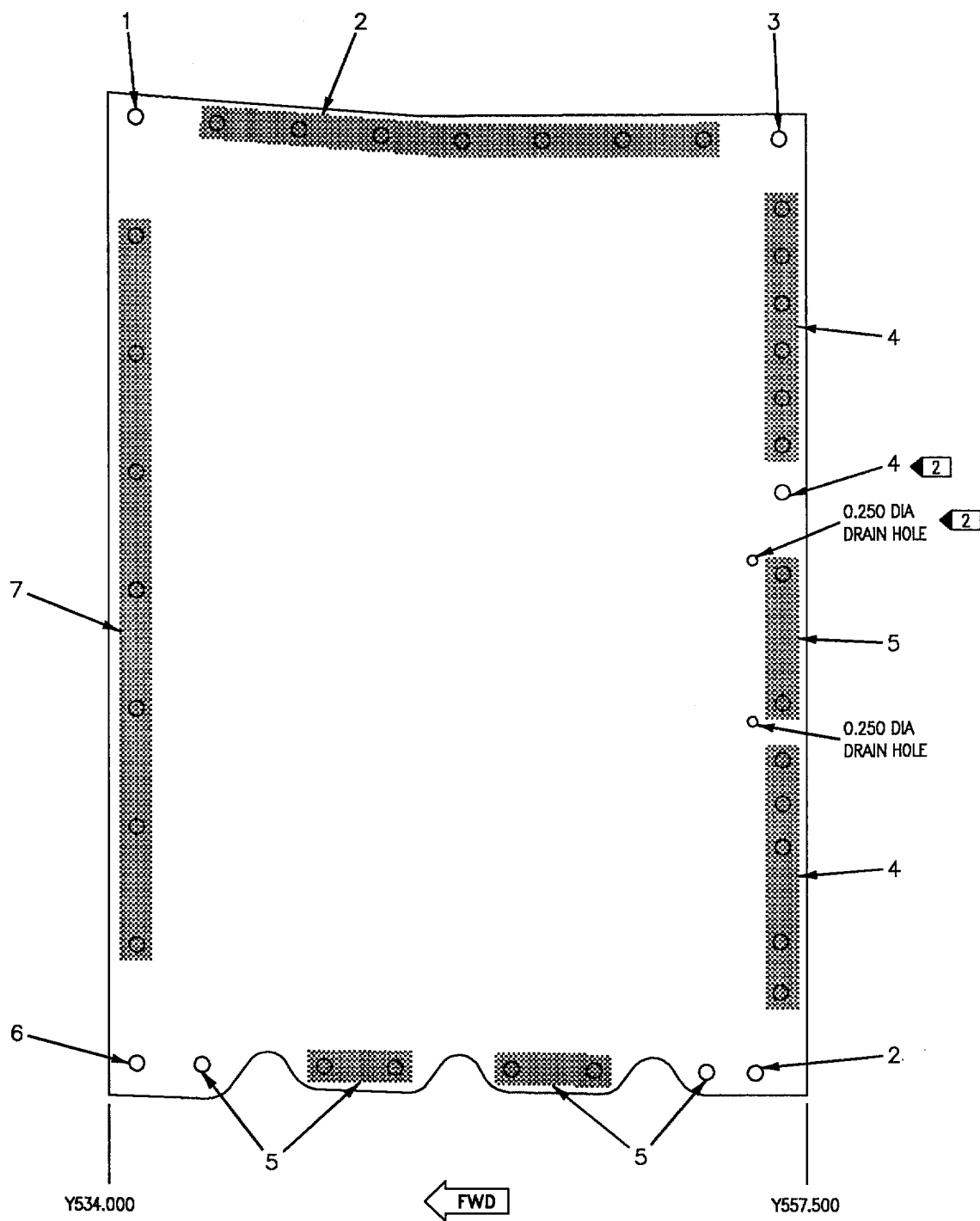
Idx No.	Eft		Nomenclature	Part Number
1			Receptacle	1950-6-8-2
2			Plate Nut	F5000-4
3			Receptacle	1950-6-9-0
4			Receptacle	1950-6-7-2
5			Receptacle	1950-6-10-0
6			Rivet	MS20426B6
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.377 +0.007 -0.000.</p> <p> Hole diameter is 0.250 +0.006 -0.000.</p> <p> Hole diameter is 0.196 +0.006 -0.000.</p>				

Figure 3. Cover (Door 52) Replacement (Sheet 2)



30010401

Figure 4. Cover (Door 53) Replacement (Sheet 1)



161741 AND UP

30010402

Figure 4. Cover (Door 53) Replacement (Sheet 2)










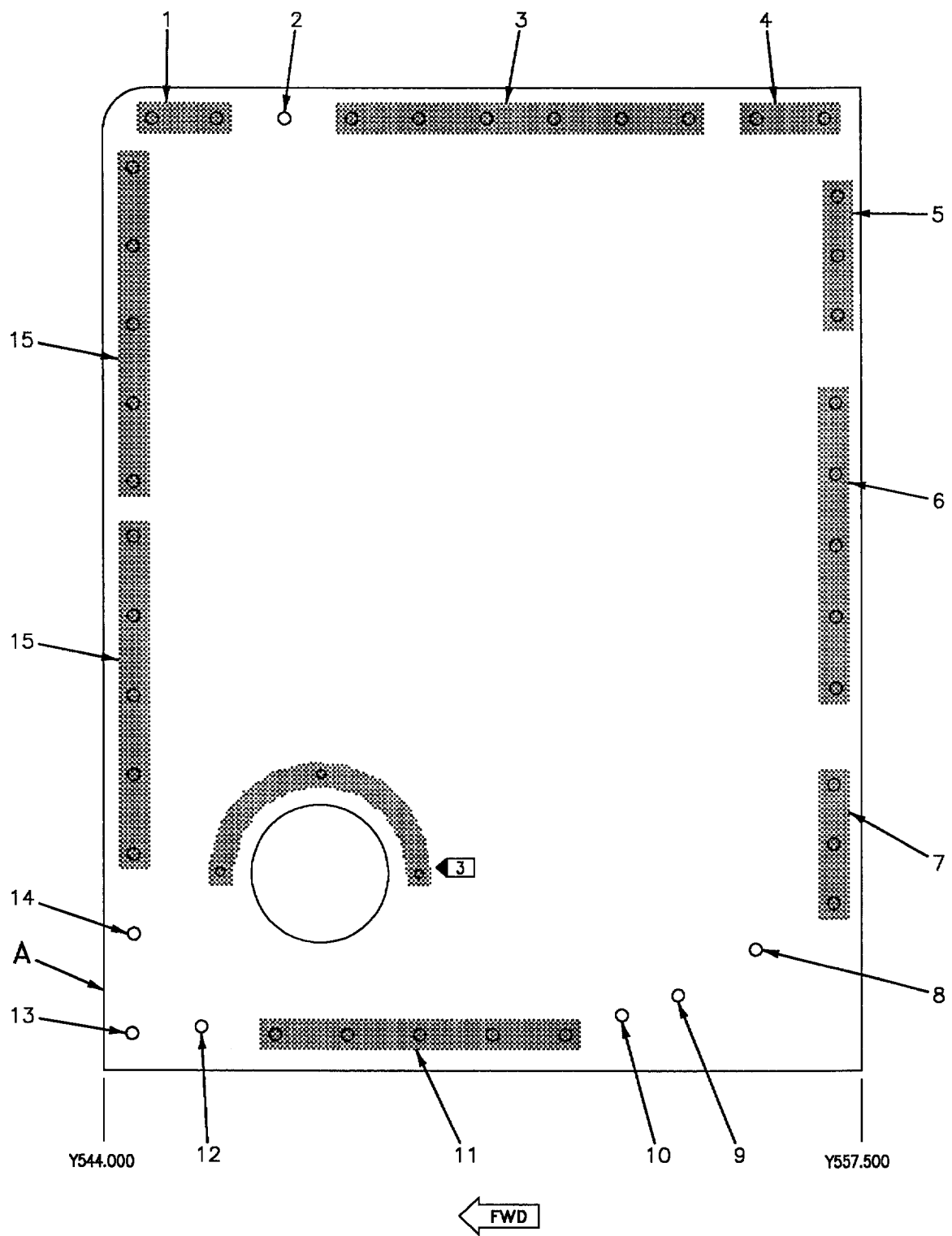
Idx No.	Eft		Nomenclature	Part Number
1			Receptacle	1950-6-6-4
2			Receptacle	1950-6-9-1
3			Receptacle	1950-6-4-6
4			Receptacle	1950-6-8-2
5			Receptacle	1950-6-9-0
6			Receptacle	1950-6-7-3
7			Receptacle	1950-6-10-0
LEGEND				
 Hole diameter in cover is 0.3770 +0.0050 -0.0000 and 0.377 +0.005 -0.000 in structure.  Right side only.				

Figure 4. Cover (Door 53) Replacement (Sheet 3)



161353 THRU 161741

30010501

Figure 5. Cover (Door 56) Replacement (Sheet 1)

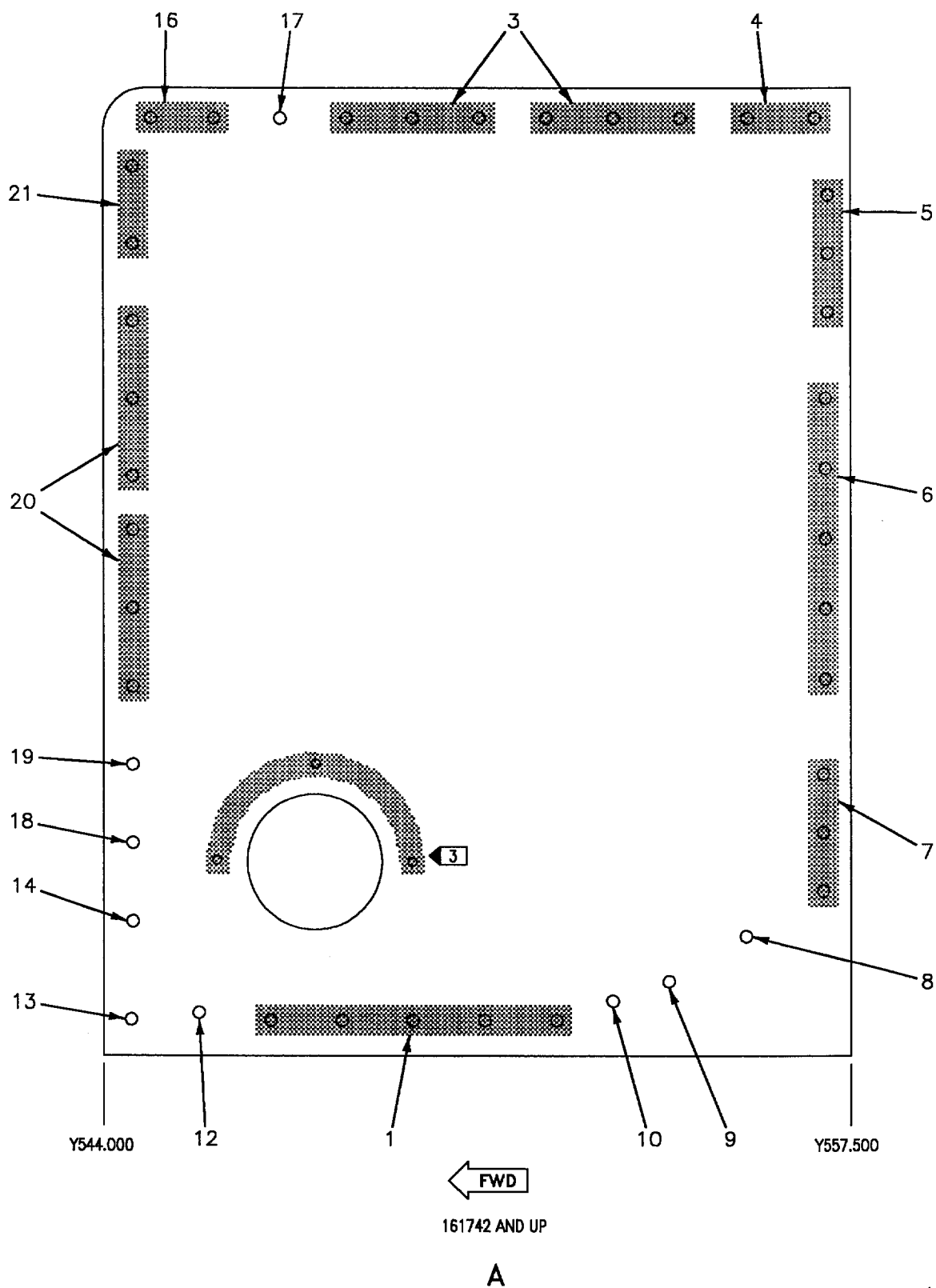


Figure 5. Cover (Door 56) Replacement (Sheet 2)
















































Idx No.	Eft		Nomenclature	Part Number
1			 Plate Nut  Shim	MS21075L4
2			Plate Nut  Shim	MS21075L4 NAS1195D4WH
3			 Gang Channel Shim	G14421-6-4-10-3 4M49A4D10-3
4			 Plate Nut Shim	F1972-4-4 NAS463YDD416M
5			 Gang Channel Shim	74A324605-2005 4M49A4DM-8-3
6			 Gang Channel Shim	74A324605-2011 4M49A4DM10-5
7			 Gang Channel Shim	G14421-6-4-8-3 4M49A4DM-8-3
8			 Plate Nut Shim	NAS1870-4-6 NAS463XDD416M
9			 Plate Nut	NAS1870-4-2
10			 Plate Nut Shim	NAS1870-4-6 NAS463XDD416L
11			 Gang Channel	G14421-6-4-10-5
12			 Plate Nut Shim	NAS1870-4-2 NAS463XDD416
13			 Plate Nut	MS21060L4
14			 Plate Nut	MS21075L4
15			 Gang Channel Shim	74A324605-2007 4M49A4D11-5
16			 Plate Nut  Shim	MS21075L4
17			 Plate Nut  Shim	MS21075L4
18			 Plate Nut	F49249E4-5
19			 Plate Nut Shim	F49249E4-6 NAS463XD416N0
20			 Gang Channel Shim	G14421-6-4-11-3 4M49A4D11-3

Figure 5. Cover (Door 56) Replacement (Sheet 3)












Idx No.	Eft		Nomenclature	Part Number
21			 Gang Channel Shim	G14421-6-4F11-2 4M49A4D 11-2
LEGEND				
	Hole diameter in cover is 0.2560 +0.0006 -0.0000 and 0.250 +0.006 -0.000 in structure.			
	Six required.			
	Hole diameter is 0.195 +0.007 -0.000.			
	Three required.			
	Four required.			
	Attached with NAS1097AD3 rivet. Determine length on installation.			
	161934 AND UP.			
	Eight Required.			
	161353 THRU 161933.			

Figure 5. Cover (Door 56) Replacement (Sheet 4)

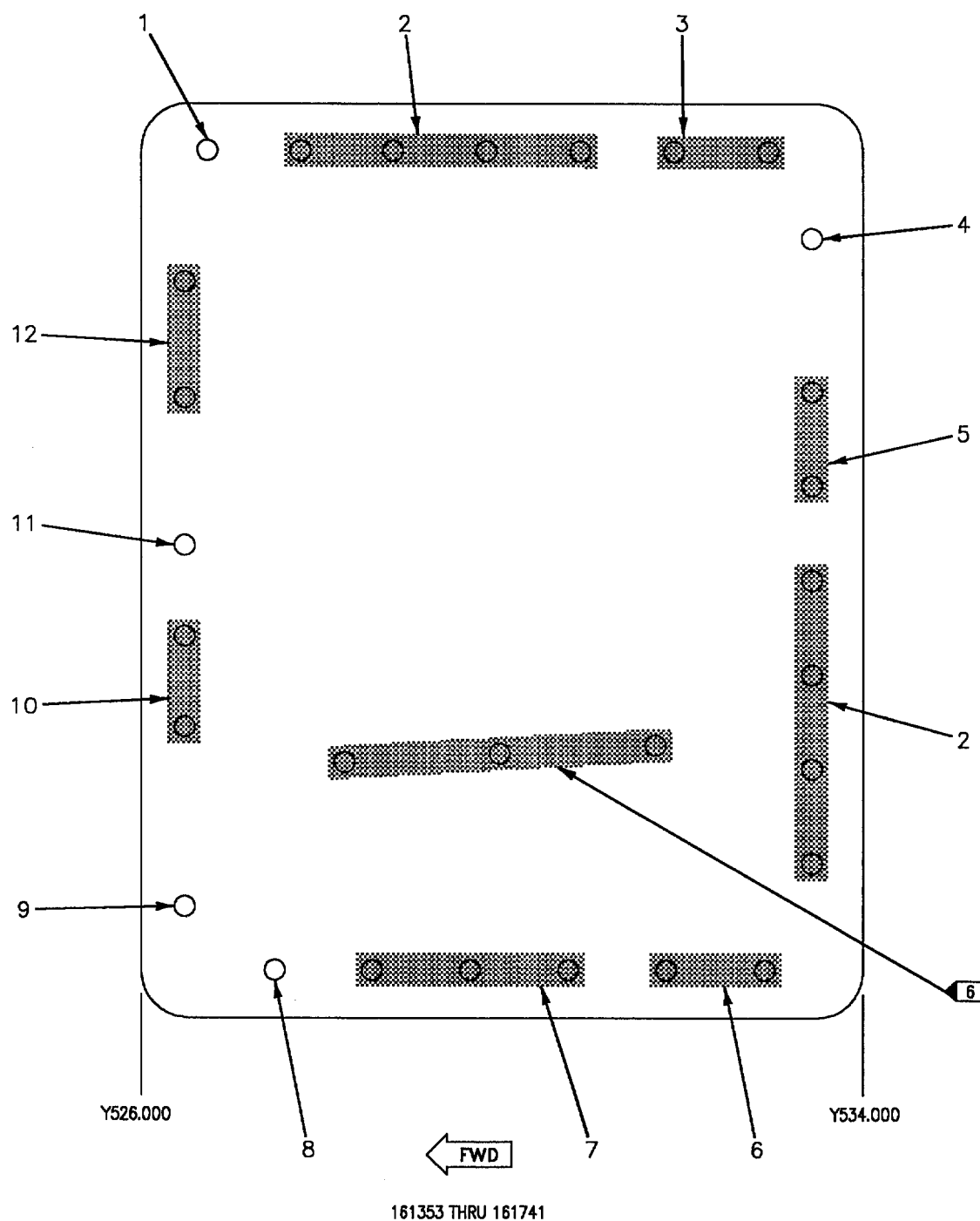


Figure 6. Cover (Door 116) Replacement (Sheet 1)

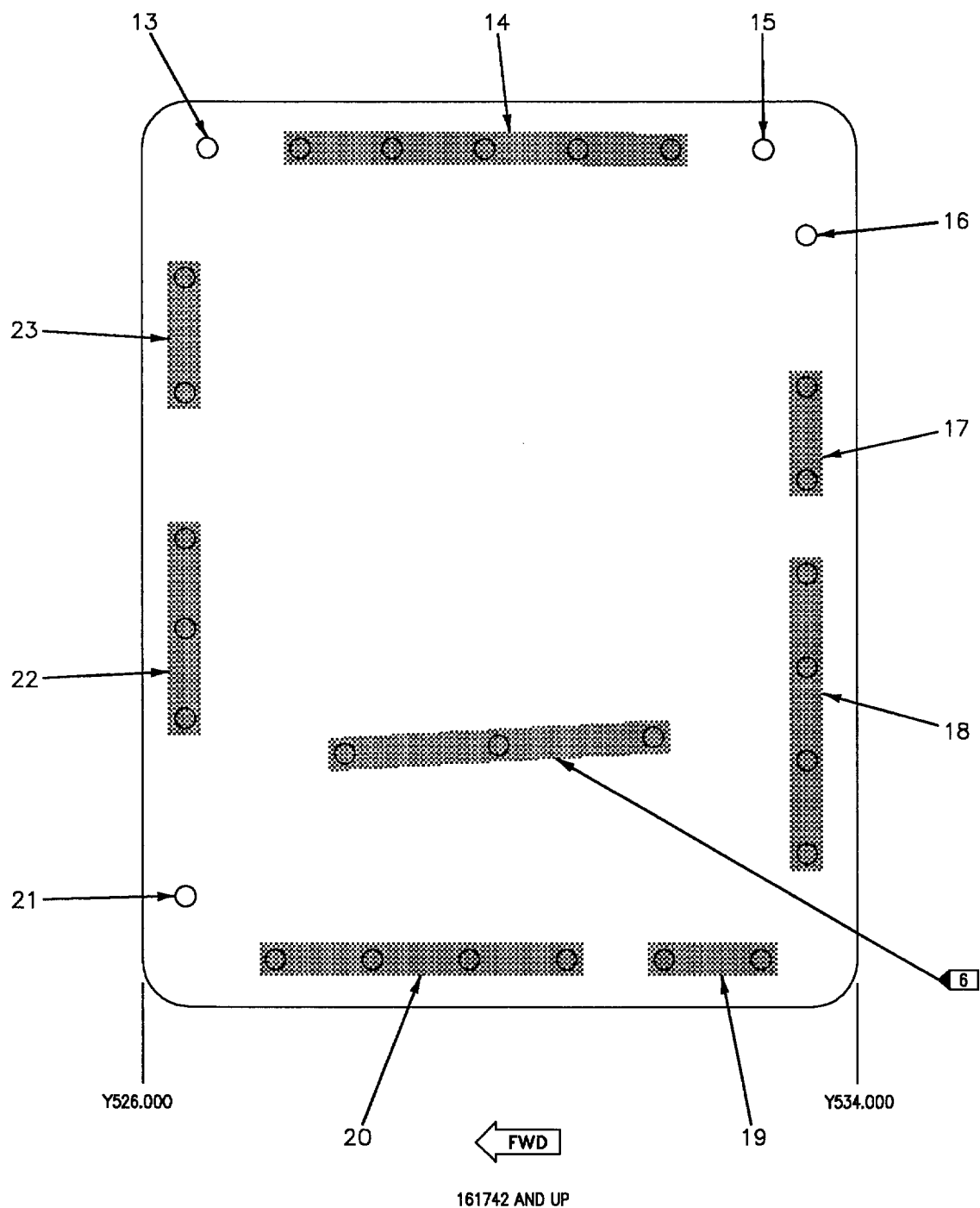


Figure 6. Cover (Door 116) Replacement (Sheet 2)

Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut  Shim Plate Nut Spacer	MS21062L4 NAS463YDD416H F1972-4-4 74A324933-2079
2			Gang Channel Shim	G14421-4-4-8-4 4M49A4DL8-4
3			Plate Nut	MS21075L4
4			Plate Nut Filler	MS21062L4 74A324674-2001
5			Gang Channel Gang Channel Filler	G14421-1-4F9-2 G14421-2-4F9-2 74A324674-2003
6			Plate Nut  Shim	MS21075L4 NAS1195D4WH
7			Gang Channel Gang Channel Filler	G14421-4-4L8-4 G14421-4-4-8-4 74A324674-2009
8			Gang Channel Gang Channel	G14421-4-4L8-4 G14421-4-4-8-4
9			Plate Nut	NAS1870-4-6
10			Gang Channel	G14421-6-4F8-2
11			Plate Nut Filler	MS21075L4 74A324674-2007
12			Gang Channel Gang Channel Filler	G14421-1-4F10-2 G14421-4-4F10-2 74A324674-2005
13			Plate Nut	F39669N4-1
14			Gang Channel	G1442-1-4-8-5
15			Plate Nut	F29337-4-2
16			Plate Nut	F49069N4-2
17			Gang Channel	G14421-4-4F9-2
18			Gang Channel	G14421-4-4-8-4
19			Gang Channel Shim	G14421-1-4L9-2 4M49L4DT9-2
20			Gang Channel Shim	G14421-1-4-8-4 4M49A4DT8-4

Figure 6. Cover (Door 116) Replacement (Sheet 3)










Idx No.	Eft		Nomenclature	Part Number
21			Plate Nut	F49069N4-4
22			Gang Channel	G14421-4-4F8-3
23			Gang Channel	G14421-4-4F10-2
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.250 +0.006 -0.000.</p> <p> Two required.</p> <p> 161521 THRU 161741.</p> <p> 161353 THRU 161520.</p> <p> 161353 THRU 161741.</p> <p> For fastener attaching hardware see figure 10.</p>				

Figure 6. Cover (Door 116) Replacement (Sheet 4)

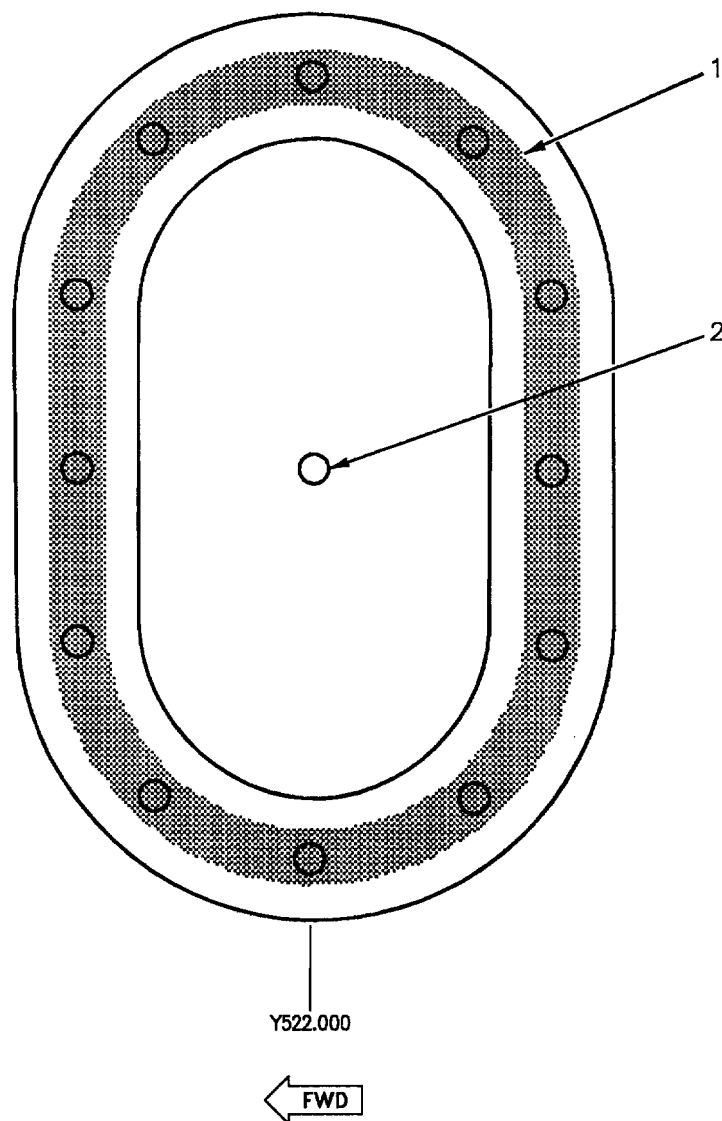


Figure 7. Cover (Door 136) Replacement (Sheet 1)





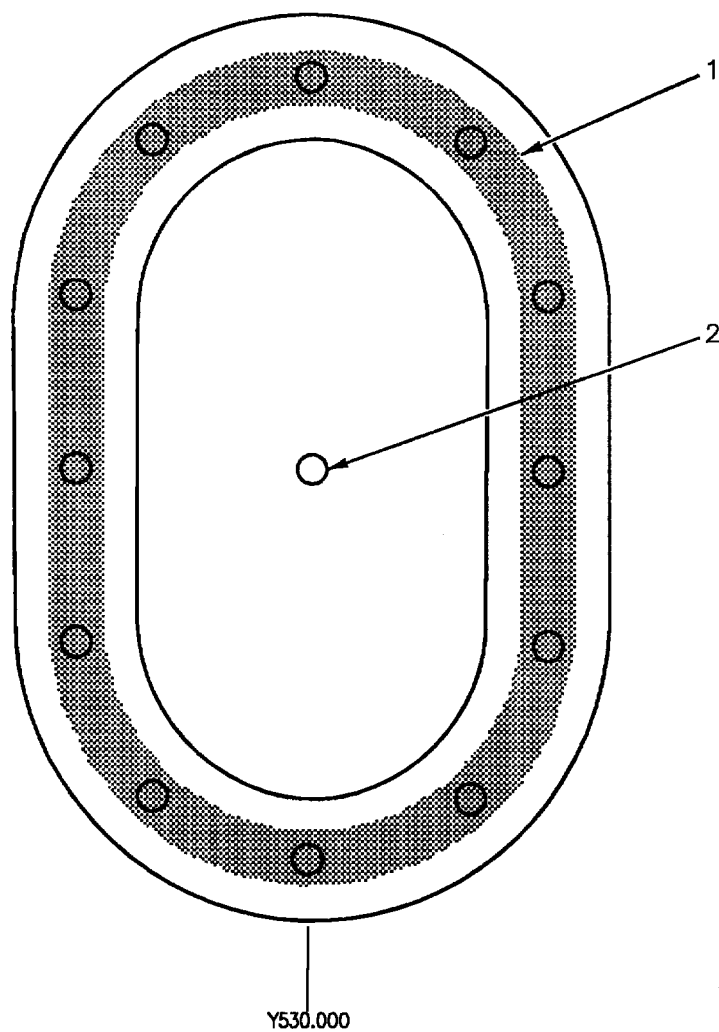
Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F49069N4-2
2			Plate Nut	F49069N4-2
LEGEND				
 Hole diameter is 0.250 +0.006 -0.000.				
 Hole diameter is 0.257 +0.007 -0.000.				

Figure 7. Cover (Door 136) Replacement (Sheet 2)



30010801

Figure 8. Cover (Door 174) Replacement (Sheet 1)





Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F49069N4-2
2			Plate Nut	F49069N4-2
LEGEND				
 Hole diameter is 0.250 +0.006 -0.000.				
 Hole diameter is 0.257 +0.007 -0.000.				

Figure 8. Cover (Door 174) Replacement (Sheet 2)

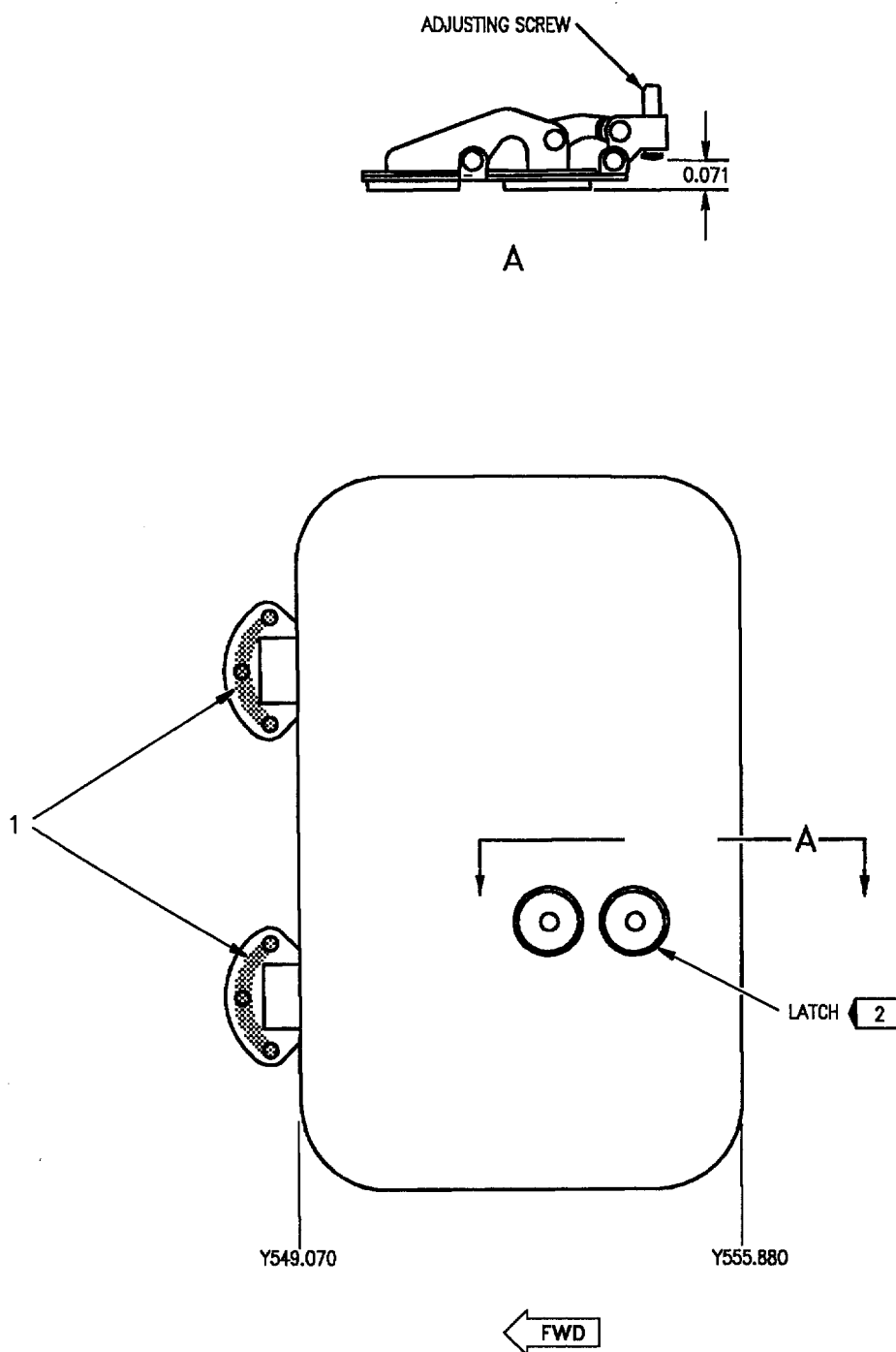


Figure 9. Cover (Door 54) Replacement (Sheet 1)




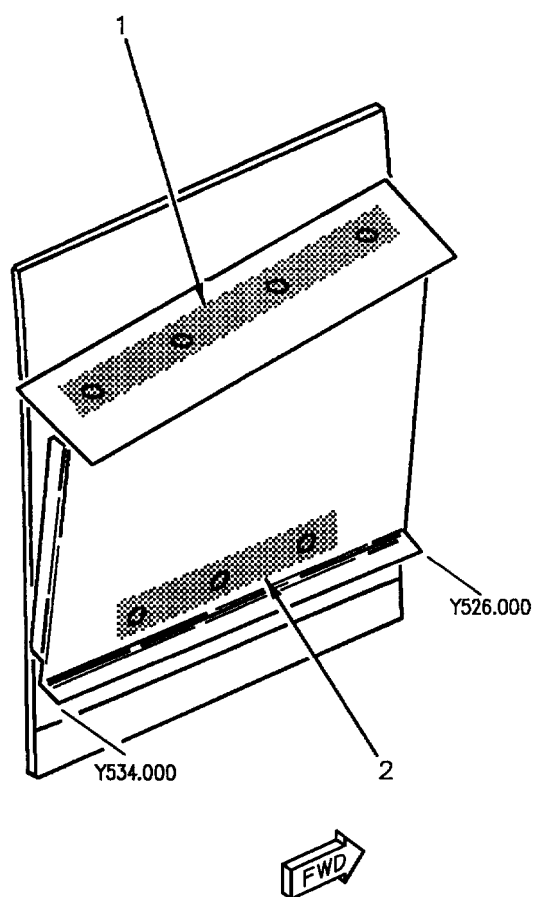
Idx No.	Eft		Nomenclature	Part Number
1			Bolt Nut	HT4024L3-4 NAS1291C3M
LEGEND				
 Hole diameter is 0.191 +0.006 -0.000.				
 For latch adjustment see Paragraph 3.				

Figure 9. Cover (Door 54) Replacement (Sheet 2)



30011001

Figure 10. Cap and Closeout, 74A324754, Replacement (Sheet 1)




Idx No.	Eft		Nomenclature	Part Number
1			Gang Channel Shim	G18421JL6-4-16 4M49L4DT16
2			Gang Channel Spacer	G18421JL1-3-14 74A324656-2003
LEGEND				
 Hole diameter is 0.281 +0.006 -0.000.				

Figure 10. Cap and Closeout, 74A324754, Replacement (Sheet 2)

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

STRUCTURE REPAIR

MAIN LANDING GEAR FORWARD DOOR

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Landing Gear, Arresting Hook, and Launch Bar, Finish System and Markings	WP042 00
Landing Gear and Related Systems	A1-F18AC-130-300
MLG Forward Door	WP049 00
Nondestructive Inspection	A1-F18AC-SRM-300
Ultrasonic Through Transmission Contact Testing, Standardization, and Inspection	
Procedures For Composite Laminate Skins Bonded to Honeycomb Core	WP008 01
Pulse Echo, Longitudinal Wave Contact, With Delay Line, For Composite Laminate Material	
Bonded to Honeycomb Core	WP008 04
Main Landing Gear Doors, Water in Honeycomb	WP076 00
Structure Repair, General Information	A1-F18AC-SRM-200
Drilling and Machining Composites	WP004 08
Adhesive, Cement, and Sealant; Preparation and Application	WP011 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Curing of Repairs	WP004 00
Water Removal	WP005 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class I Damage Repair	WP012 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class II Damage Repair	WP013 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class III Damage Repair	WP014 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IV Damage Repair	WP015 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class V Damage Repair	WP016 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VI Damage Repair	WP017 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VII Damage Repair	WP018 00
Graphite Epoxy Skin and Aluminum Honeycomb Core Class IX Damage Repair	WP019 00

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Record of Applicable Technical Directives

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Locating and determining size of damage by visual method is organizational maintenance. Locating and determining size of damage by NDI is intermediate maintenance. Repair zones are provided to allow repairs in some areas. Damage not listed or exceeding following limits requires depot engineering exceeding following limits requires depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** See figure 3. Negligible damage may be allowed to exist as is. Type and limits for inner and outer skins are as listed below:

a. Delaminations between skin plies (section A). Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations do not extend to edge of skins.

(2) Diameter is 1/2-inch or less.

(3) Distance between delaminations is at least four diameters of largest delamination. Measure distance between delaminations edge to edge.

(4) No more than three delaminations are in 12 inch diameter circle.

(5) No delaminations within 4 inches of hinge or actuator fitting.

b. Unbonds between skin and honeycomb core (section B). Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Unbonds do not extend to edge of skin.

(2) Diameter is 3/4-inch or less.

(3) Distance between unbonds is at least 4 inches. Measure distance between unbonds edge to edge.

(4) No more than three unbonds are in 12 inch diameter circle.

(5) No unbonds within 4 inches of hinge or actuator fitting.

c. Unbonds between skin and former (section C).

(1) No unbonds in area of former where the actuator fitting is attached.

(2) Diameter is 1/4-inch or less.

(3) No longer than 1 inch.

(4) Unbond area no greater than 0.20 square inch.

(5) Unbonds do not extend to edge of skin.

(6) Unbonds are separated by at least eight diameters of largest unbond, measured edge to edge.

d. Former to honeycomb core unbonds or voids (section D).

(1) No unbonds or voids within 4 inches of hinge or actuator fitting.

(2) Total cumulative length of unbonds or voids does not exceed 2 inches in 20 inches.

(3) Diameter is 1/2-inch or less.

e. Dents.

(1) Diameter less than 3 inches.

(2) Depth is no greater than 0.015 inches.

4. **REPAIRABLE DAMAGE.** See figures 2 and

4. Repairable damage is damage that can be permanently repaired with no adverse effect on structural integrity, flight characteristics, or safety of the aircraft.

5. **Skin Surface Damage and Dents Without Honeycomb Core Damage, Class I Damage.** See figure 4, sheet 1, section A. This class of damage does not require immediate repair but shall be repaired as soon as practical. Damage shall be monitored to make sure limits are not exceeded. Damage may be in repair zone B2 or C (figure 2). Class I damage is skin damage which does not exceed limits listed below:

a. Cuts, scratches, pits, erosion, or abrasions.

(1) Depth is no greater than 0.005 inch.

(2) No longer than 5 inches.

b. Dents.

(1) Depth is no greater than 0.05 inch.

(2) Skin delaminations and/or skin to core unbonds do-not exceed negligible limits.

(3) Graphite fiber damage is no greater than 0.005 inch deep.

(4) Diameter is no greater than 3 inches.

(5) Distance between dents is at least two diameters of the largest dent. Measure distance between dents edge to edge.

(6) No crushed core.

6. **Structure To Honeycomb Core Voids or Unbonds, Class II Damage.** See figure 4, sheet 2, section B. Class II damage is former to honeycomb core unbonds or voids which does not exceed the limits listed below:

a. Unbonds or voids that exceed negligible damage limits.

b. Unbonds or voids are unlimited in size and number.

c. No unbonds or voids within 3 inches of hinge or actuator fitting.

7. Skin Delaminations, Unbonds, or Skin to Core Unbonds Not Open to Edge, Class III Damage. See figure 4, sheet 2, section C. This class of damage is individual or multiple unbonds that are not open to edge of skin and are in repair zone B2 or C (figure 2). Class III damage shall not exceed limits listed below:

a. Skin to honeycomb core unbonds. Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Multiple or individual unbonds.

(2) Diameter is 2 inches or less.

(3) Distance between unbonds is at least 4 times diameter of largest unbond.

(4) No unbonds within 4 inches of hinge or actuator fitting.

b. Graphite epoxy skin to glass laminate plies. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Not open to edge.

(2) Diameter 4 inches or less.

(3) Spacing less than 4 diameters.

8. Skin Delaminations or Unbonds Open to Edge, Class IV Damage. See figure 4, sheet 3, section D. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04). Class IV damage is damage which does not exceed limits listed below:

a. Skin to former unbonds.

(1) Unbonds open to edge of skin.

(2) Unbonds that do not extend into honeycomb core.

(3) Unbond area is less than 2.0 square inches.

(4) No longer than 4 inches.

(5) Unbonds not related to any other damage.

(6) No closer than 4.0 inches to hinge or actuator fitting.

(7) Minimum spacing is 4 times length of largest unbond.

b. Delaminations between skin plies.

(1) Delaminations open to edge of skin.

(2) Unbond area is less than 2.0 square inches.

(3) No longer than 4 inches.

(4) Distance between delaminations is at least 4 times diameter of largest delamination.

(5) No closer than 4 inches to hinge or actuator fitting.

c. Inner and outer skin unbonds.

(1) Unbonds open to edge of skin.

(2) Width is 3/4-inch or less.

(3) No longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

d. Graphite epoxy to glass laminate plies.

(1) Unbonds open to edge of skin.

(2) Width is less than 1 inch.

(3) Length no longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

9. Fiber Damage Around Fastener Holes and Surface Rips, Class V Damage. See figure 4, sheet 3, section E. Class V damage is loose or broken fibers, or skin abrasion around fastener holes or countersinks which does not exceed limits listed below:

- a. Depth is no greater than 0.014 inch.
- b. No longer than 1/2-inch.

10. Skin Damage Without Penetration, Class VI Damage. See figure 4, sheet 4, section F. Class VI damage is delaminations over honeycomb core that exceed negligible damage limits. Class VI damage is also cracks, cuts, scratches, or erosion exceeding class I damage, located in zone B2, but does not exceed limits listed below:

- a. Depth that is greater than 0.005 inch but less than full skin penetration.
- b. Diameter is no greater than maximum damage size (figure 2).
- c. Damage is located where required patch does not overlap fasteners.
- d. Distance between damages is at least 4 times diameter of largest damage.
- e. Edge distance of cleaned-up damage hole shall be no closer than 1 diameter from edge of honeycomb core ramp in inner skin, or extend beyond areas where skins are not next to core.

f. Skin delaminations. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations that are not opened to edge of skin.

(2) Diameter is 3 inches or less.

(3) Distance between delaminations is at least 4 times diameter of largest delamination.

(4) No delaminations within 4 inches of hinge or actuator fitting.

11. Skin Damage With Penetration and Dents With Honeycomb Core Damage, Class VII

Damage. See figure 4, sheet 4, section G. Class VII damage is skin and honeycomb core damage, located in zone B2, but does not exceed the limits listed below:

- a. Full penetration of one or both skins.
- b. Honeycomb core damage is allowable.
- c. Diameter is no greater than maximum damage size (figure 2).
- d. Damage is located where required patch does not overlap fasteners.
- e. Distance between damages is at least four times diameter of largest damage.
- f. Edge distance of cleaned-up damage hole in inner skin shall be no closer than one diameter from edge of honeycomb core ramp, or extend beyond areas where skin is not next to core.
- g. Requirements are same for outer skin except core ramp edge distance restriction is not applicable.
- h. Dents.
 - (1) Diameter greater than 3 inches.
 - (2) Depth greater than 0.05 inches.
 - (3) Crushed core is allowed.

12. Water in Honeycomb Core, Class VIII Damage. Class VIII damage is water trapped in honeycomb core. For locating water in core (A1-F18AC-SRM-300, WP076 00).

13. Edge Damage, Class IX Damage. See figure 4, section H. Class IX damage is damage which does not exceed limits listed below:

- a. Depth less than 0.20 inches.
- b. Length less than 4 inches.
- c. Edge to edge spacing greater than four times largest crush.
- d. Class IV damage not exceeded.

14. REPAIRS.

15. Classes I, II, III, IV, V, VI, VIII, and IX are organizational maintenance. Class VII less than 1.5 inches in diameter is organizational maintenance; over 1.5 inches in diameter is intermediate maintenance. Classes I, II, III, IV, V, VI, VII, VIII, and IX may be repaired per procedures referenced below:

a. Repair class I damage (A1-F18AC-SRM-250, WP012 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

b. Repair class II damage (A1-F18AC-SRM-250, WP013 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

c. Select patch for Class III damage per paragraph 16. Repair class III damage (A1-F18AC-SRM-250, WP014 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

d. Repair class IV damage (A1-F18AC-SRM-250, WP015 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

e. Repair class V damage (A1-F18AC-SRM-250, WP016 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

f. Select patch for Class VI damage per paragraph 16. Repair class VI damage (A1-F18AC-SRM-250, WP017 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

g. Select patch for Class VII damage per paragraph 16. Repair class VII damage (A1-F18AC-SRM-250, WP018 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

h. Repair class VIII damage (A1-F18AC-SRM-250, WP005 00).

i. Repair Class IX damage (A1-F18AC-SRM-250, WP019 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

16. **PATCH SELECTION.** Type of patch to be used depends on class of damage, repair zone, type of adhesive and damage size. Select applicable patch number for Class III damage using table 1, Class VI and VII damage using table 2, and limits listed below:

a. When selecting patch for Class VI or Class VII damage, damage occurring in more than one zone must meet requirements of zone with smallest maximum damage size (figure 2). Any damage occurring partially in zone C requires depot engineering disposition.

NOTE

Titanium patches conform more easily to skin curvature.

b. Required patch must not lap over any abrupt surface break or sharp curvature that may prevent patch from easily conforming to skin surface.

c. Patch may not interfere with structure or cover any countersink fasteners.

d. When selecting patch for Class III damage, patch must overlap injection holes by at least 1/2-inch.

e. Patches exceeding limits a, b, c, or d require depot engineering disposition.

17. **EXCESSIVE DOOR EDGE GAP REPAIR.** See figure 6. Use mating door or manufacture mold block to match configuration of mating door. When filling gap, be sure mold block material will maintain correct shape while curing adhesive at required temperatures.

NOTE

Determine if door edge gap exceeds maximum gap limits, per figure 5.

18. Gap Repair of Graphite Epoxy Door Sill.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide Waterproof	A-A-1047 Grit 180 and 240-9X11
Adhesive	EA9321 A/B
Cheesecloth	CCC-C-440 Type 1 Class 1
Cloth, Teflon, Non Porous	TEMP-R-GLAS 6TB
Mens Gloves, Cotton Work Gloves	MIL-G-3866, Type 1, Small or Medium
Metal Spatula, Tongue Depressor	GG-D-226 Type 1
Pressure Sensitive Tape 1 Inch Wide	855-1.000 IN

a. Prepare sill area to be repaired by sanding with 180 grit then 240 grit abrasive paper.

b. Clean area using clean dry cheesecloth.

c. Mask around outside edge of sill to be repaired with pressure sensitive tape to catch excess adhesive squeezeout.



Wear clean cotton gloves when making repairs to avoid contamination of bond surface.

d. Place one layer of release fabric between sill and mating door or mold block.

e. Tape release fabric to door or mold block.

f. Secure door or mold block to sill using C-clamps with back-up plates to prevent damage to door and sill.



Adhesive

11

g. Prepare EA9321 A/B adhesive, (A1-F18AC-SRM-200, WP011 00).

h. Apply EA9321 A/B adhesive with spatula, filling gap between sill and door or mold block.

i. Place layer of release fabric over repair area and attach back-up plate to sill using C-clamps to prevent sag of EA9321 A/B adhesive.

j. Cure at room temperature for 2 hours then remove C-clamps and back-up plate and cure at 190°F ± 10°F for 1 hour.

k. Remove pressure sensitive tape from repair area.

l. Clean up excess EA9321 A/B adhesive at repair area to maintain trim gap using 240 grit abrasive paper and clean with dry cheesecloth.

m. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

19. Gap Repair of Aluminum Door Sill.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047, Grit 180 and 240-9 X 11
Adhesive	EA9321 A/B
Cheesecloth	CCC-C-440 Type 1 Class 1
Cloth, Teflon, Non Porous Release Fabric	TEMP-R-GLAS 6TB
Men's Gloves, Cotton Work Gloves	MIL-G-3866, Type 1, Small or Medium

Materials Required (Continued)

Nomenclature	Specification or Part Number
Metal Cleaner	222555
Aluminum Cleaning Material	
Pressure Sensitive Tape, 1 Inch Wide	855-1.000 IN
Primer, Adhesive	BR-127
Rubber Gloves	ZZ-G-381, Type 1, Style 1, Small, Medium, or Large
Utility Apron, General Purpose Apron	MIL-A-41829
Varnish Brush, Flat, 1/2-Inch to 1 Inch Wide	H-B-695, Type 1 Grade A Size 1-1/2

a. Mask around outside edge of sill to be repaired with pressure sensitive tape.

b. Sand repair area to uniform finish using 240 grit abrasive paper.

c. Wipe surface clean with clean, dry cheesecloth.



Metal Cleaner

12

d. Brush apply metal cleaner over exposed surface. Apply metal cleaner at room temperature. To keep metal cleaner from drying out, apply metal cleaner as required to keep metal cleaner wet for at least 15 minutes.



Wear clean cotton gloves when making repairs to prevent contamination.

e. Wipe off metal cleaner with clean, dry cheesecloth.

f. Thoroughly remove any metal cleaner residue from bonding surface using clean cheesecloth saturated with tap water.

g. Check for water break free surface. Repeat steps d through g at least once so surface has been cleaned twice. If after second cleaning, water break occurs, repeat steps d through g until water break free. If water break free after two cleanings, continue to step h.

NOTE

After drying, if repair surface is not primed within 4 hours, cover repair surface with waxfree paper. If repair surface is not primed within 8 hours of cleaning, complete cleaning procedure must be repeated.

h. Remove tape mask. Lightly wipe surface dry with clean cheesecloth. Dry bonding surface using hot air gun for 10 minutes, or allow to air dry for at least 30 minutes.



Adhesive Primer

13

NOTE

The BR-127 primer adhesive must be stirred and mixed before use. Solids in primer will settle out quickly. Stir primer continuously while being used. Do not apply primer liberally to bonding surface.

i. After drying, use clean cheesecloth to make pad for applying primer adhesive. Moisten pad with primer adhesive and wipe surface to be bonded lightly with pad.

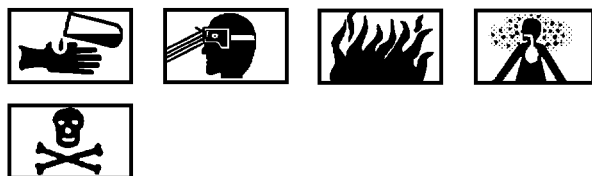
j. Cure primer adhesive for 30 minutes at room temperature, then cure with heat blanket for 1 hour at 225°F ±10°F.

k. Mask around outside edge of sill to be repaired with pressure sensitive tape to catch excess primer adhesive squeezeout.

l. Place one layer of release fabric between sill and mating door or mold block.

m. Tape release fabric to door or mold back.

n. Secure door or mold block to sill using c-clamps with back-up plates to prevent damage to door and sill.



Adhesive

11

o. Prepare EA9321 A/B adhesive, (A1-F18AC-SRM-200, WP011 00).

p. Apply EA9321 A/B adhesive with spatula, filling gap between sill and door or mold back.

q. Place layer of release fabric over repair area and attach back-up plate to sill using c-clamps to prevent sag of adhesive.

r. Cure at room temperature for 2 hours then cure at 190°F ±10°F for 1 hour.

s. Remove pressure sensitive tape from repair area.

t. Clean up excess adhesive at repair area to maintain trim gap, using 240 grit abrasive paper and clean with dry cheesecloth.

u. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

20. REPLACEMENT.

21. Door is spared with excess trim.

a. Replace door (A1-F18AC-130-300, WP049 00).

b. Trim door to maintain trim gap. See figure 5. For trimming (A1-F18AC-SRM-200, WP004 08).

c. Refinish if required (A1-F18AC-SRM-500, WP042 00).

22. MLG FORWARD DOOR FAIRING REPLACEMENT. See figure 1.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

250 Watt Infrared Heat Source	-
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Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicon Carbide, Waterproof	A-A-1047 Grit 180 and 240-9 X 11
C-Clamps	-
Cheesecloth	CCC-C-440 Type 1 Class 1
Methyl Ethyl Ketone	TT-M-261
Sealant Scraper	-
Sealing Compound	MIL-S-8802 Class B-2

a. Clean door and fairing, if required, of old sealant using sealant scraper.

b. Lightly sand door and fairing to smooth finish.



Methyl Ethyl Ketone

1

c. Clean door and fairing with cheesecloth moistened with methyl ethyl ketone.

d. Wipe door and fairing with clean dry cheesecloth before methyl ethyl ketone dries.

e. Let air dry for 15 minutes.



Sealing Compound

6

f. Prepare temperature resistant sealing compound (A1-F18AC-SRM-200, WP011 00).

g. Apply temperature resistant sealing compound to door and fairing, (A1-F18AC-SRM-200, WP011 00).



h. Press fairing in position on door.

When using heat cure method, do not exceed 140° F or damage to assembly may occur.

i. Use C-clamps to hold until dry.

k. Connect heat source to 74D110165 repair set with MS3101R16-10P connector (A1-F18AC-SRM-250, WP004 00).

j. Remove excess squeezed out temperature resistant sealing compound around edge of fairing with cheesecloth moistened with methyl ethyl ketone.

l. Heat cure for 3 hours at 120°F to 140°F.

m. Remove C-clamps.

n. Refinish area (A1-F18AC-SRM-500, WP042 00).

Table 1. Patch Selection for Class III Damage










Injection Hole Spacing	Graphite Epoxy Patch		Titanium Patch	
	 No.	Dia.	 No.	Dia.
0.50 to 1.25	-1003	2.25	-	-
1.25 to 1.75	-1001 or -1005	2.75	-2001	2.75
1.75 to 2.00	-	-	-2003	3.00
2.00 to 3.00	-1007	4.00	-2005	4.00
NOTES 1. Bond patch using FM300 adhesive.  Dash number of 74K000002 kit.  Dash number of 74K000003 kit.				

Table 2. Patch Selection for Repair Zone B2, Graphite Epoxy and Titanium Patches

Damage Size (Dia)	Graphite Epoxy Patch Two Plies		Titanium Patch Three Plies	
	 No.	Dia.	 No.	Dia.
0.0 to 0.25	-1007 -1005	4.00	-2005 -2003 -2035	4.00
0.25 to 1.50	-1009 -1007	5.25	-2009 -2007 -2037	5.25
1.50 to 2.75	-1011 -1009	6.50	-2013 -2011 -2039	6.50
2.75 to 4.00	-1013 -1011	7.75	-2017 -2015 -2041	7.75
4.00 to 5.25	-1015 -1013	9.00	-2021 -2019 -2043	9.00
5.25 to 6.00	-1017 -1015	10.25	-2025 -2023 -2045	10.25
NOTES  FM300 adhesive is required in zone B2.  Dash number of 74K000002 kit.  Dash number of 74K000003 kit.				

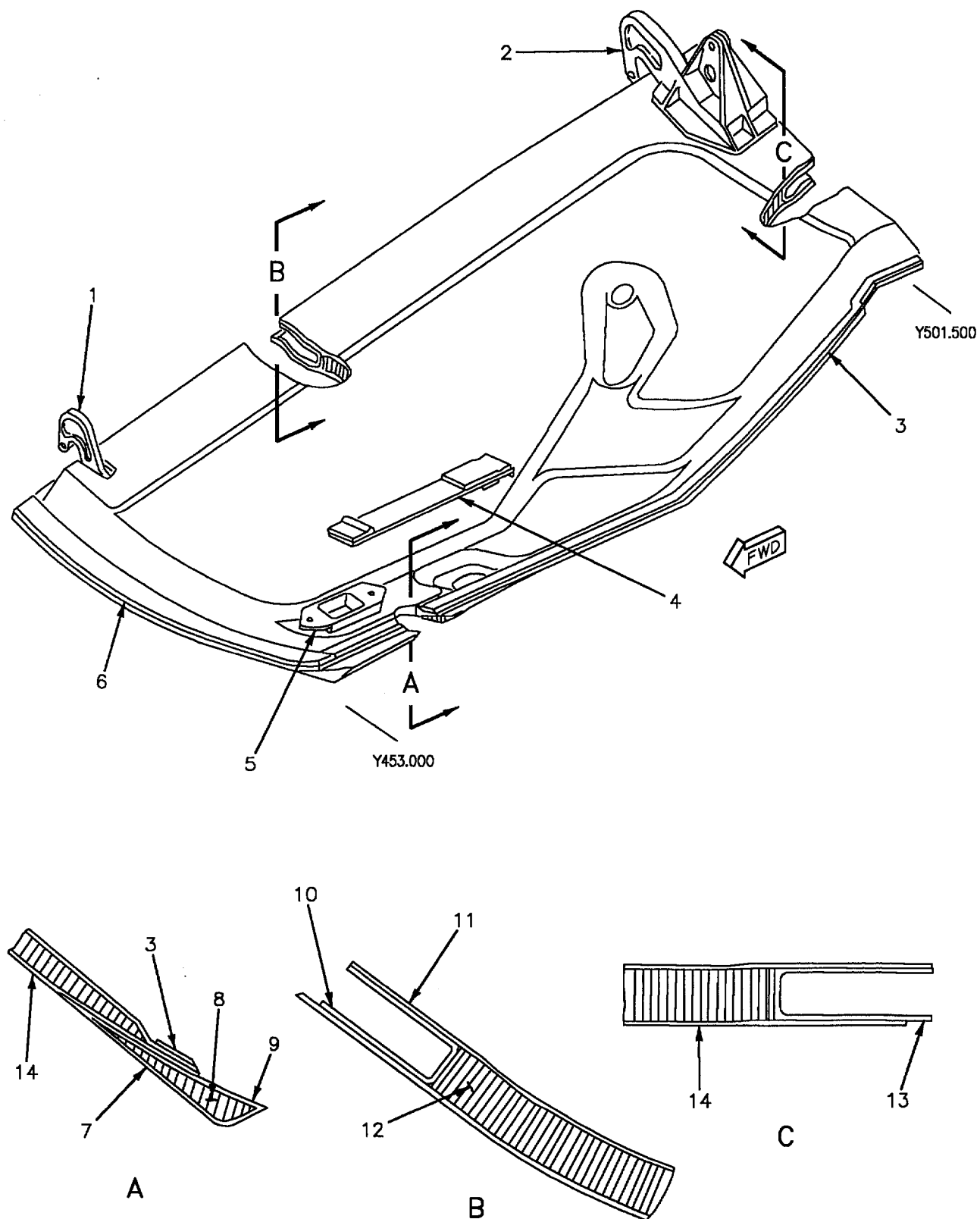


Figure 1. Material Index (Sheet 1)































Idx No.	Eft	Nomenclature and Part No.	Description	Material
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2	 	Hinge Half 74A426014-9003, -9004 74A426014-2003, -2004	Forging	7075-T73 Al Aly
3	  	Ply 74A426020-2113 74A426020-2131 74A426020-2011		
4		Strap 74A426017-1001		Woven Nylon
5		Bracket 74A426015-2003, -2004	Forging	7075-T73 Al Aly
6	  	Ply 74A426020-2111 74A426020-2129 74A426020-2009		
7		 Ply 74A426020-2081, -2091	 Sheet	Glass Laminate Epoxy
8		 Core 74A426020-2085, -2089		Syntactic Foam
9		 Ply 74A426020-2083, -2093	 Sheet	Glass Laminate Epoxy
10	    	Former 74A426023-1009, -1010 74A426023-1019, -1020 74A426023-1021, -1020 74A426023-1021, -1022 74A426023-1023, -1024	 Sheet	Graphite Epoxy Laminate
11		Ply, Inner 74A426020-2001, -2003	 Sheet	Glass Laminate Epoxy
12	 	Core 74A426022-2007, -2008 74A426022-2009, -2010		5056 Aluminum Honeycomb
13		Former 74A426024-2013, -2014	Bar Forged	6Al-4V Ti Anl

Figure 1. Material Index (Sheet 2)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
14	<div>9</div> <div>10</div>	Skin, Outer 74A426021-1003, -1004 74A426021-1005, -1006	<div>7</div>	<div>7</div>
<p style="text-align: center;">LEGEND</p> <div>1</div> Webbing, textile, ten inches long. <div>2</div> Made of graphite laminate epoxy. <div>3</div> Core, Syntactic foam, filled with epoxy resin. <div>4</div> Eighty cells per foot, 0.0014 inch thick foil. <div>5</div> 161353 THRU 161525. <div>6</div> 161526 AND UP. <div>7</div> Skin is made of various plies of graphite epoxy laminate. <div>8</div> 161353 THRU 161363. <div>9</div> 161353 THRU 161741. <div>10</div> 161742 AND UP. <div>11</div> 161353 THRU 161753. <div>12</div> 161754 THRU 161928. <div>13</div> 161526 THRU 161741. <div>14</div> Rub strip is made of glass fabric laminate. <div>15</div> These parts make up 74A426020-2073, -2095 fairing assembly, which is bonded to outer skin with PROSEAL 890 (MIL-S-8802) adhesive. <div>16</div> 161932 THRU 163124. <div>17</div> 161353 THRU 161987. <div>18</div> 162394 AND UP. <div>19</div> 161929 THRU 161931. <div>20</div> 163125 AND UP.				

Figure 1. Material Index (Sheet 3)

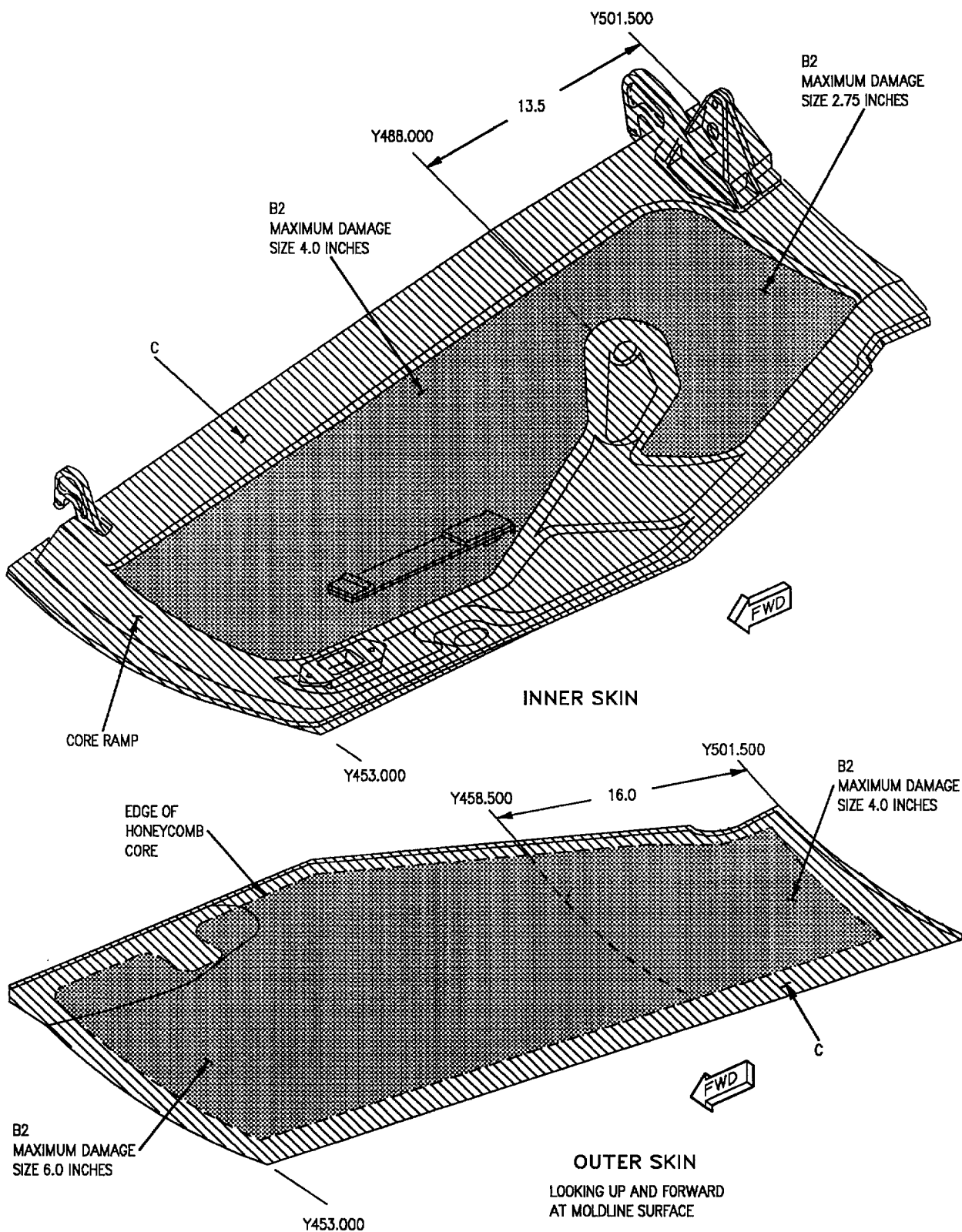


Figure 2. Repair Zones

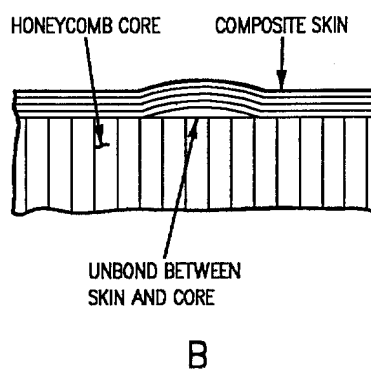
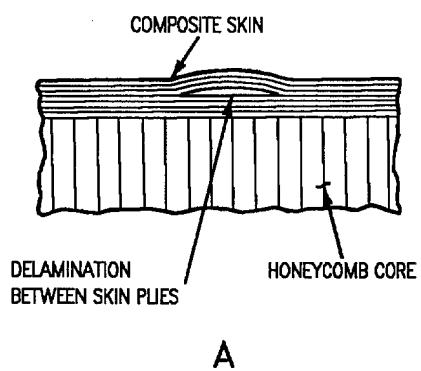
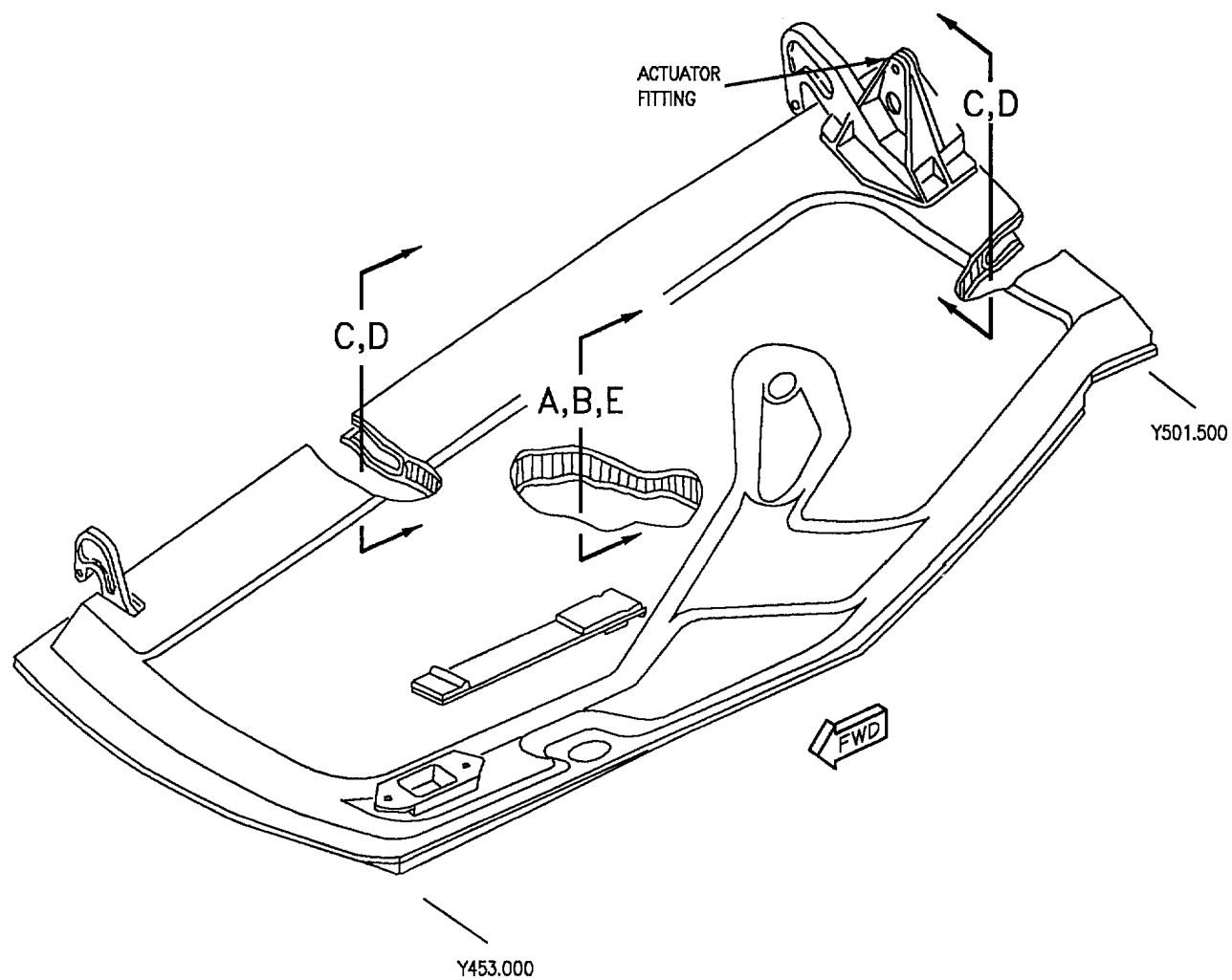
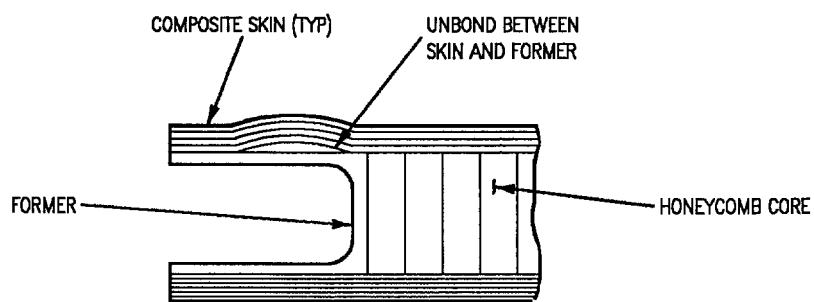
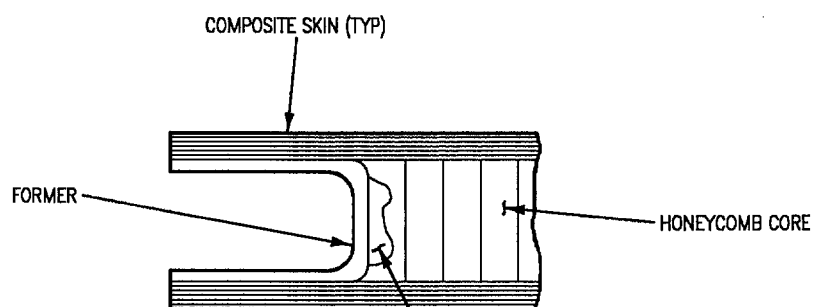


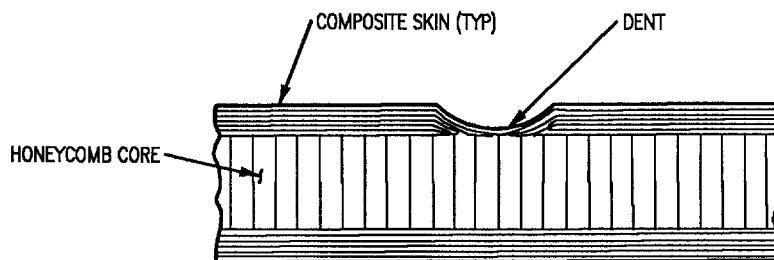
Figure 3. Negligible Damage (Sheet 1)



C

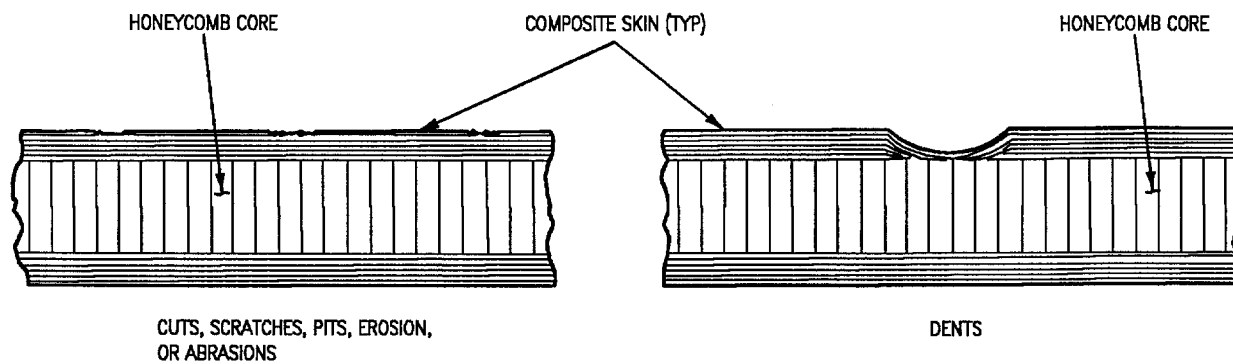
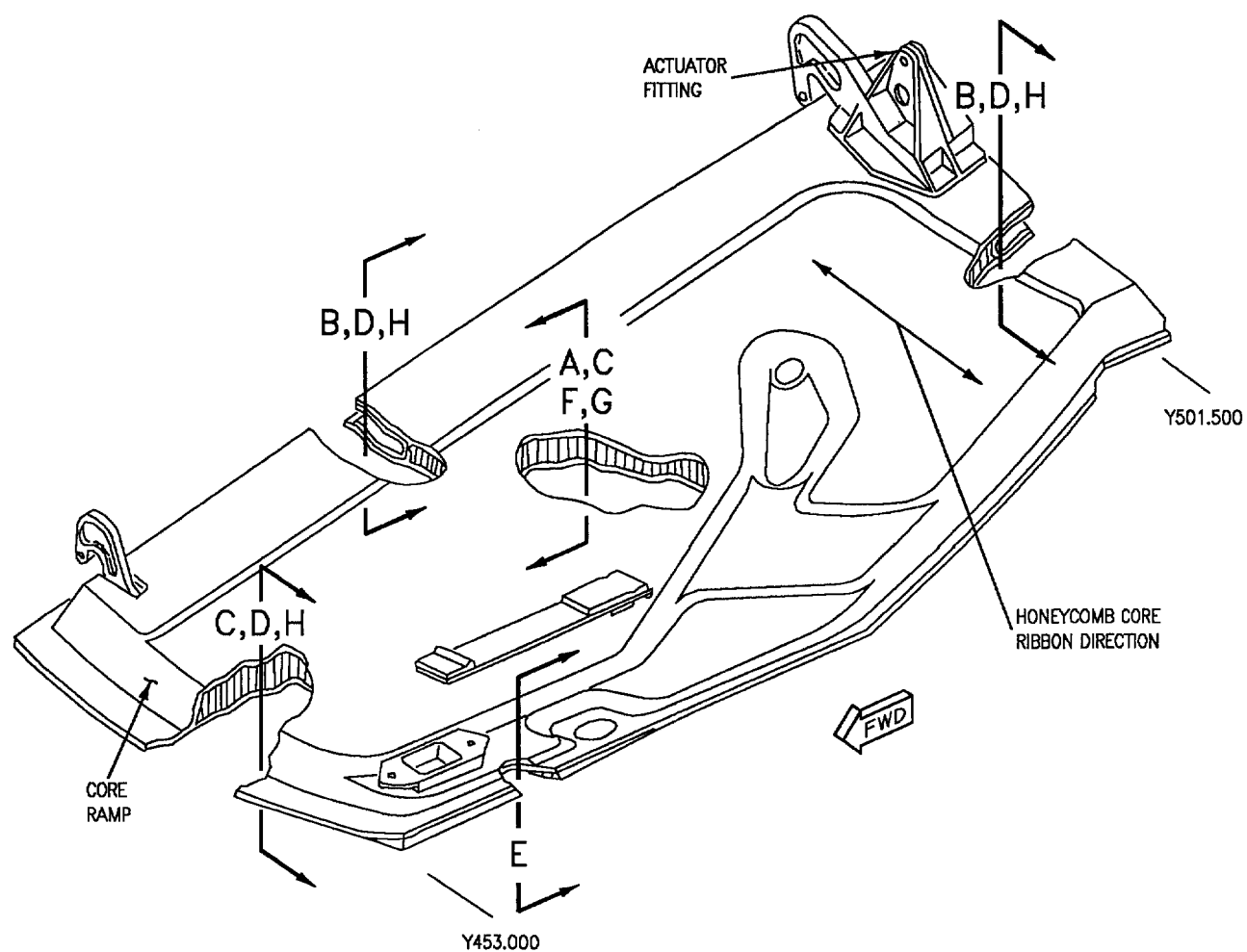


D



E

Figure 3. Negligible Damage (Sheet 2)



CLASS I DAMAGE

A

Figure 4. Repairable Damage (Sheet 1)

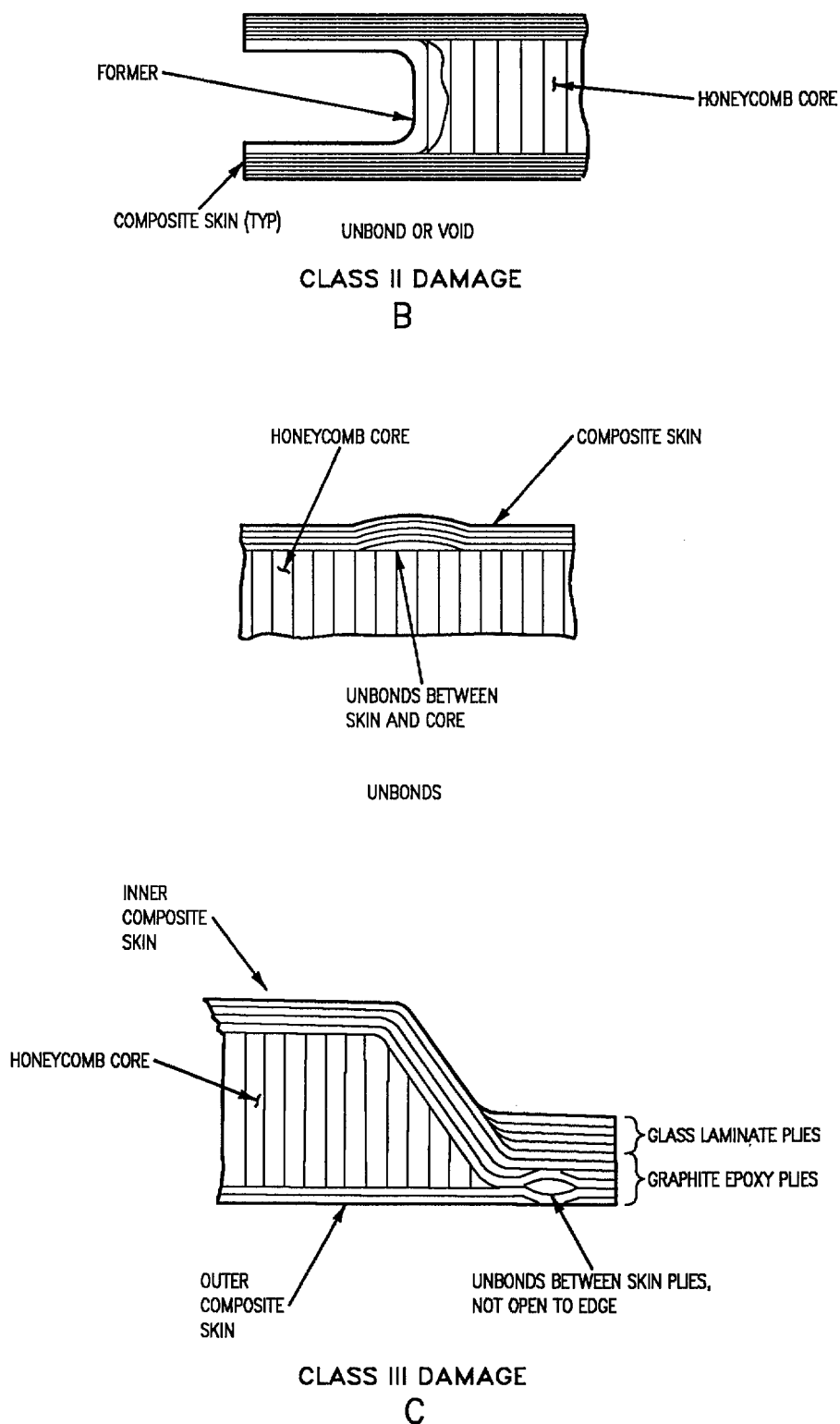


Figure 4. Repairable Damage (Sheet 2)

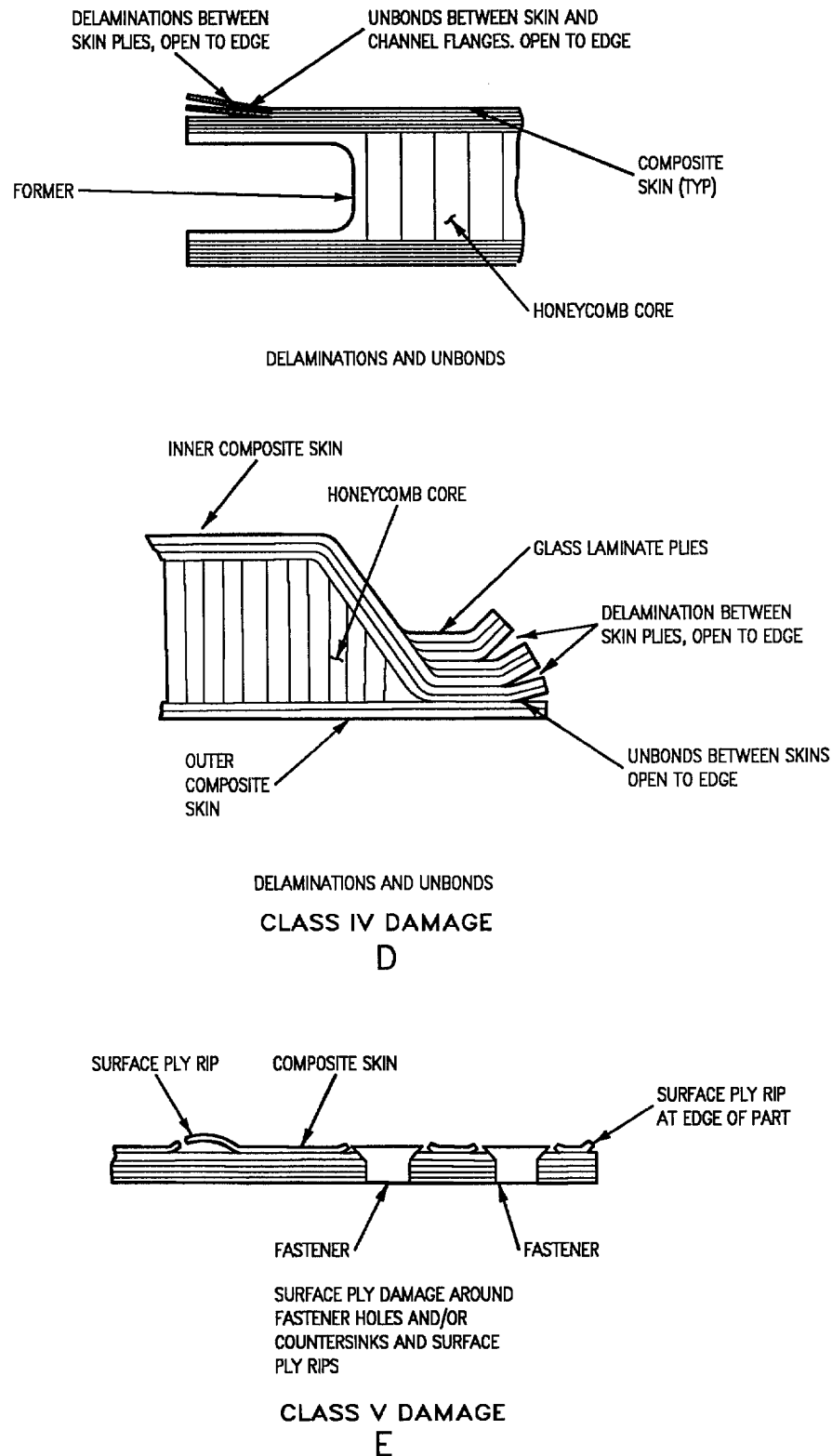
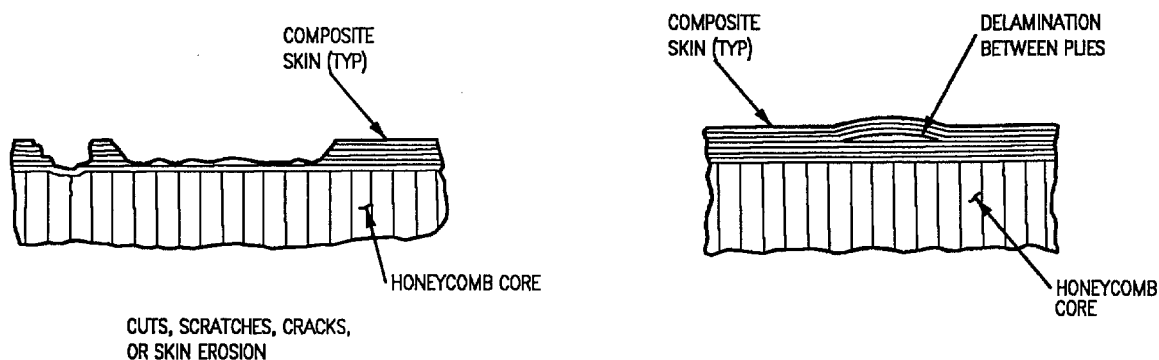
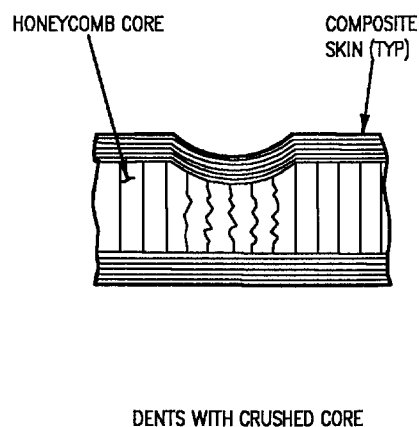
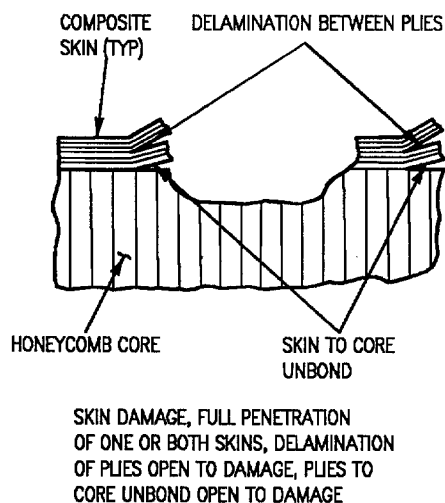
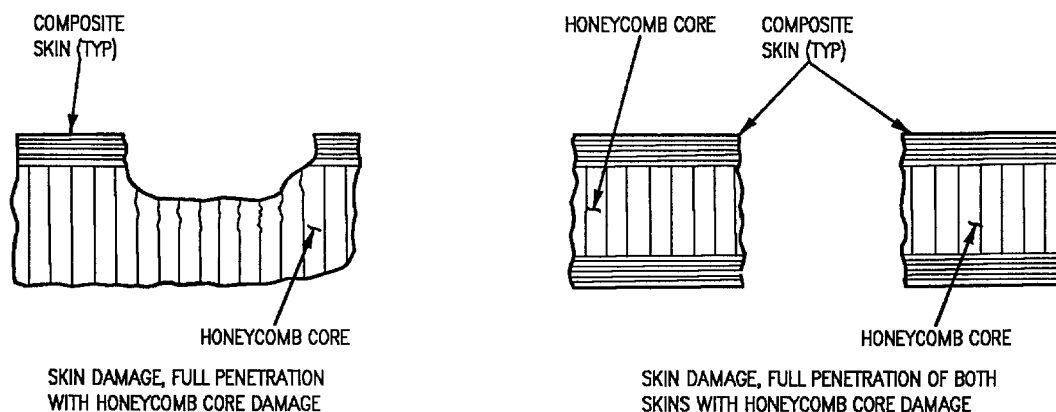


Figure 4. Repairable Damage (Sheet 3)



CLASS VI DAMAGE

F



CLASS VII DAMAGE

G

Figure 4. Repairable Damage (Sheet 4)

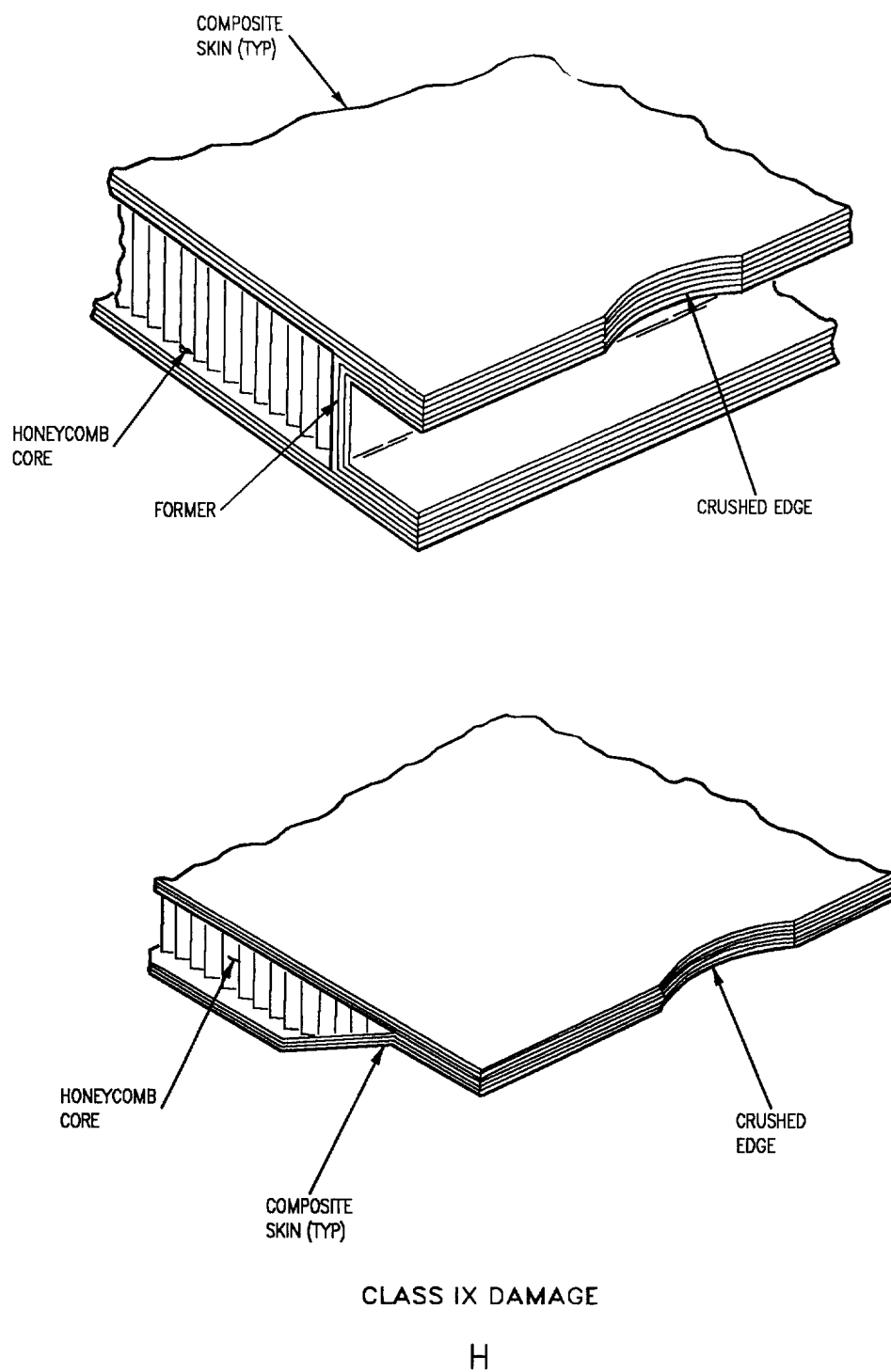
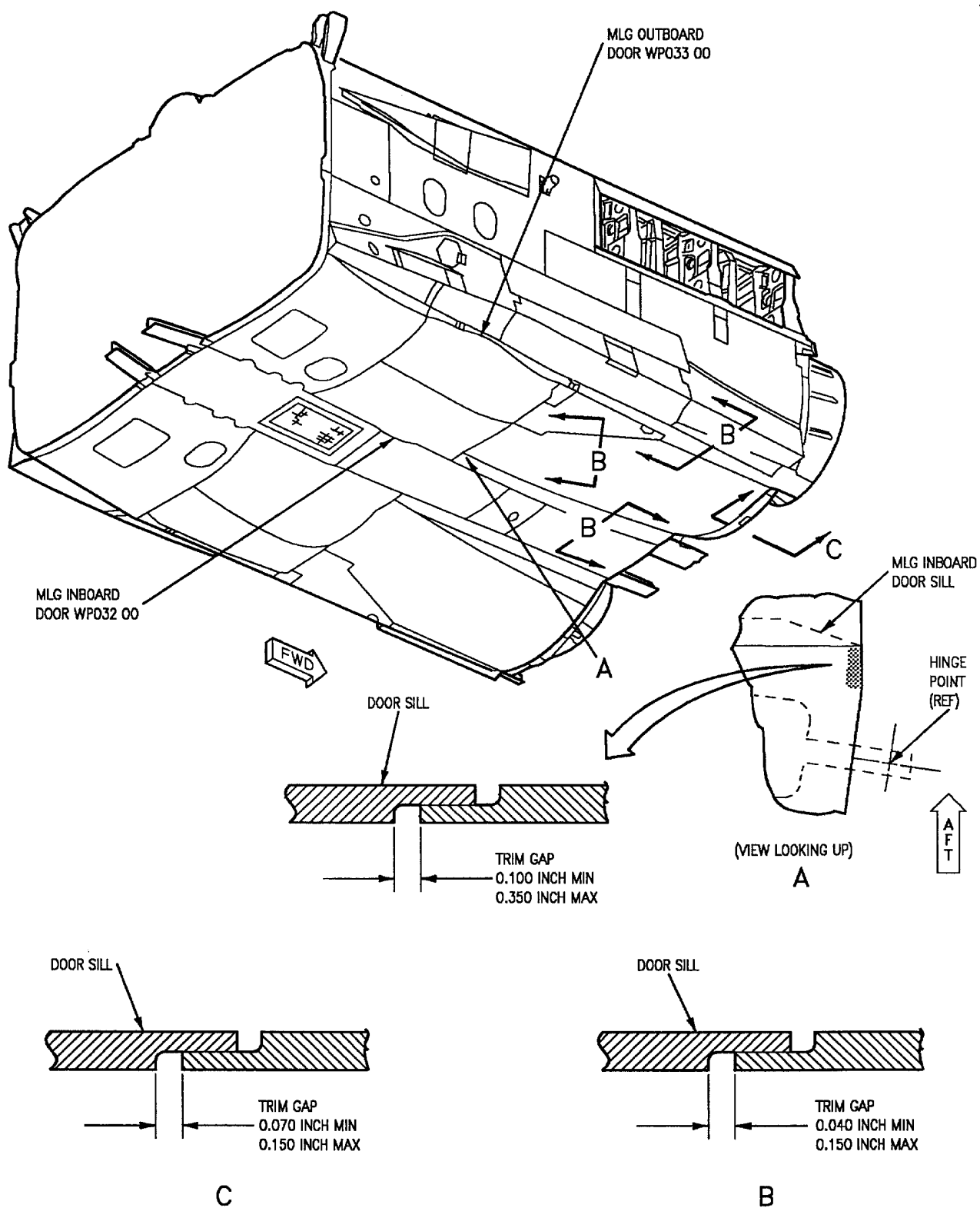


Figure 4. Repairable Damage (Sheet 5)



031005

Figure 5. Replacement Trim Gap

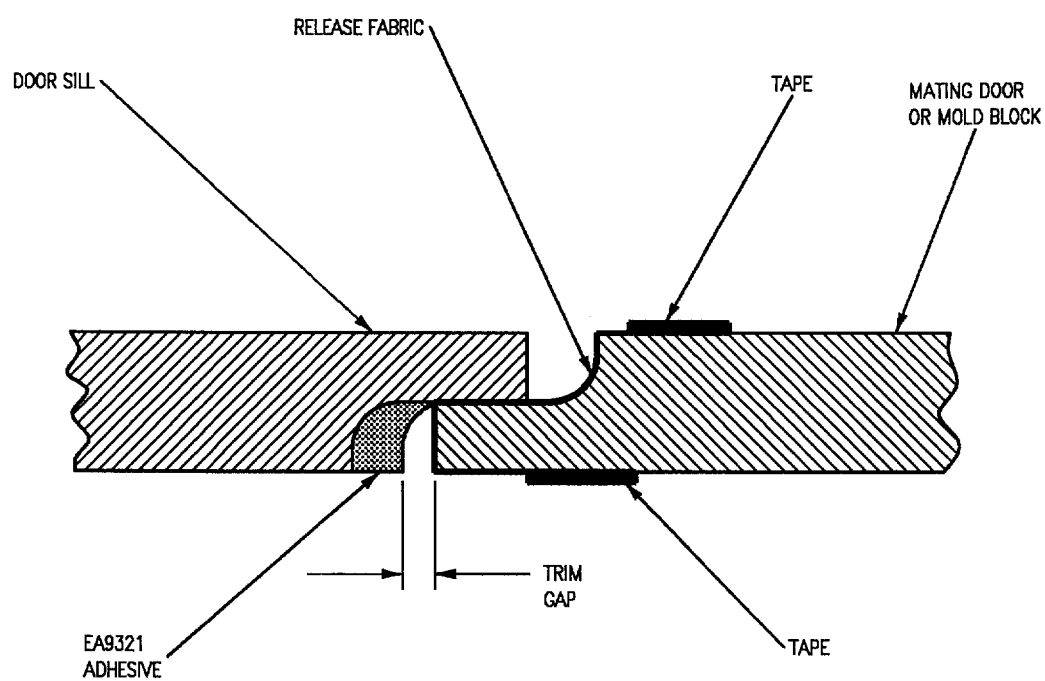


Figure 6. Door Edge Gap Repair

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

STRUCTURE REPAIR

MAIN LANDING GEAR INBOARD DOOR

Reference Material

Nondestructive Inspection	A1-F18AC-SRM-300
Radiographic Method	WP005 00
Ultrasonic Through Transmission Contact Testing, Standardization, and Inspection	
Procedures For Composite Laminate Skins Bonded to Honeycomb Core	WP008 01
Pulse Echo, Longitudinal Wave Contact, without Delay Line, for Composite	
Laminate Material	WP008 02
Pulse Echo, Longitudinal Wave Contact, with Delay Line, for Composite Laminate	
Material Bonded to Honeycomb Core	WP008 04
Main Landing Gear Doors, Water in Honeycomb	WP076 00
Main Landing Gear Inboard Door Skin to Core Unbonds and Edge Delaminations	WP076 02
Structure Repair, General Information	A1-F18AC-SRM-200
Drilling and Machining Composites	WP004 08
Adhesive, Cement, and Sealant; Preparation and Application	WP011 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Curing of Repairs	WP004 00
Water Removal	WP005 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class I Damage Repair	WP012 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class II Damage Repair	WP013 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class III Damage Repair	WP014 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IV Damage Repair	WP015 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class V Damage Repair	WP016 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VI Damage Repair	WP017 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VII Damage Repair	WP018 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class XII Damage Repair	WP021 01
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IX Damage Repair	WP019 00
Aluminum, Graphite Epoxy, or Titanium Patch Installation and Removal	WP007 00
Material Preparation	WP003 00
Aircraft Corrosion Control	A1-F18AC-SRM-500
Cleaning	WP006 00
Landing Gear, Arresting Hook, and Launch Bar, Finish System and Markings	WP042 00
Landing Gear and Related Systems	A1-F18AC-130-300
MLG Inboard Door	WP047 00

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Record of Applicable Technical Directives

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Locating and determining size of damage by visual method is organizational maintenance. Locating and determining size of damage by NDI is intermediate maintenance. Repair zones are provided to allow repairs in some areas. Damage not listed or exceeding following limits requires depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** See figure 3. Negligible damage may be allowed to exist as is. Type and limits for inner and outer skins are as follows:

a. Delaminations between skin plies (section A). Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations do not extend to edge of skins.

(2) Diameter is 1/2-inch or less.

(3) Distance between delaminations is at least four diameters of largest delamination. Measure distance between delaminations edge to edge.

(4) No more than three delaminations are in a 12 inch diameter circle.

(5) No delaminations within 4 inches of hinge or actuator fitting.

b. Unbonds between skin and honeycomb core (section B). Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Unbonds do not extend to edge of skin.

(2) Diameter is 3/4 inch or less.

(3) Distance between unbonds is at least 4 inches. Measure distance between unbonds edge to edge.

(4) No more than three unbonds are in 12 inch diameter circle.

(5) No unbonds within 4 inches of hinge or actuator fitting.

c. Unbonds between skin and former (section C).

(1) No unbonds are in area of former where the actuator fitting is attached.

(2) Diameter is 1/4 inch or less.

(3) No longer than 1 inch.

(4) Unbond area no greater than 0.20 square inch.

(5) Unbonds do not extend to edge of skin.

(6) Unbonds are separated by at least eight diameters of largest unbond, measured edge to edge.

d. Former to honeycomb core unbonds or voids (section D).

(1) No unbonds or voids within 4 inches of hinge or actuator fitting.

(2) Total cumulative length of unbonds or voids does not exceed 2 inches in 20 inches.

(3) Diameter is 1/2-inch or less.

e. Dents.

(1) Diameter less than 3 inches.

(2) Depth is no greater than 0.015 inches.

4. **REPAIRABLE DAMAGE.** See figures 2 and 4. Repairable damage is damage that can be permanently repaired with no adverse effect on structural integrity, flight characteristics, or safety of aircraft.

5. Skin Surface Damage and Dents Without Honeycomb Core Damage, Class I Damage. See figure 4, sheet 1, section A. This class damage does not require immediate repair but shall be repaired as soon as practical. Damage shall be monitored to make sure limits are not exceeded. Damage may be in repair zone A1, A2 or C (figure 2). Class I damage is skin damage which does not exceed limits listed below:

a. Cuts, scratches, pits, erosion, or abrasions.

(1) Depth is no greater than 0.005 inch.

(2) No longer than 5 inches.

b. Dents.

(1) Depth is no greater than 0.05 inch.

(2) Skin delaminations and/or skin to core unbonds do not exceed negligible limits.

(3) Graphite fiber damage is no greater than 0.005 inch deep.

(4) Diameter is no greater than 3 inches.

(5) Distance between dents is at least two diameters of largest dent. Measure distance between dents edge to edge.

(6) No crushed core.

6. Structure to Honeycomb Core Voids or Unbonds, Class II Damage. See figure 4, sheet 2, section B. Class II damage is former to honeycomb core unbonds or voids which do not exceed limits listed below:

a. Unbonds or voids that exceed negligible damage limits.

b. Unbonds or voids are unlimited in size and number.

c. No unbonds or voids within 3 inches of hinge or actuator fitting.

7. Skin Delaminations, Unbonds, or Skin to Core Unbonds Not Open to Edge, Class III

Damage. See figure 4, sheet 2, section C. This class of damage is individual or multiple unbonds that are not open to edge of cover and are in repair zone A1, A2, or C (figure 2). Class III damage shall not exceed limits listed below:

a. Skin to honeycomb core unbonds. Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Multiple or individual unbonds.

(2) Diameter is 2 inches or less.

(3) Distance between unbonds is at least 4 times diameter of largest unbond.

(4) No unbonds within 4 inches of hinge or actuator fitting.

b. Graphite epoxy skin to glass laminate plies. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Not open to edge.

(2) Diameter 4 inches or less.

(3) Spacing less than 4 diameters.

8. Skin Delaminations or Unbonds Open to Edge, Class IV Damage. See figure 4, sheet 3, section D. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04). Class IV damage is damage which does not exceed limits listed below:

a. Skin to former unbonds.

(1) Unbonds open to edge of skin.

(2) Unbonds that do not extend into honeycomb core.

(3) Unbond area is less than 2.0 square inches.

(4) No longer than 4 inches.

(5) Unbonds not related to any other damage.

(6) No closer than 4 inches to hinge or actuator fitting.

(7) Minimum spacing is 4 times length of largest unbond.

b. Delaminations between skin plies.

(1) Delaminations open to edge of skin.

(2) Unbond area is less than 2.0 square inches.

(3) No longer than 4 inches.

(4) Distance between delaminations is at least 4 times diameter of largest delamination.

(5) No closer than 4 inches to hinge or actuator fitting.

c. Inner and outer skin unbonds.

(1) Unbonds open to edge of skin.

(2) Width is 3/4 inch or less.

(3) No longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

d. Graphite epoxy to glass laminate plies.

(1) Unbonds open to edge of skin.

(2) Width is less than 1 inch.

(3) Length no longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

9. Fiber Damage Around Fastener Holes and Surface Rips, Class V Damage. See figure 4, sheet 3, section E. Class V damage is loose or broken fibers, missing fibers, or skin abrasion around fastener holes or countersinks which does not exceed limits listed below:

a. Depth is no greater than 0.014 inch.

b. Width is no greater than 1/4-inch.

c. No longer than 1/2-inch.

10. Skin Damage Without Penetration, Class VI Damage. See figure 4, sheet 4, section F. Class VI damage is delaminations over honeycomb core that exceed negligible damage limits. Class VI damage is also cracks, cuts, scratches, or erosion exceeding Class I damage, located in zone A1 or A2, but does not exceed limits listed below:

a. Depth that is greater than 0.005 inch but less than full skin penetration.

b. Diameter is no greater than maximum damage size (figure 2).

c. Damage is located where required patch does not overlap fasteners.

d. Distance between damages is at least 4 times diameter of largest damage.

e. Edge distance of cleaned-up damaged hole shall be no closer than 1 diameter from edge of honeycomb core ramp in inner skin, or extend beyond areas where skins are not next to core.

f. Skin delaminations. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations not opened to edge of skin.

(2) Diameter is 3 inches or less.

(3) Distance between delaminations is at least 4 times diameter of largest delamination.

(4) No delaminations within 4 inches of hinge or actuator fitting.

11. Skin Damage With Penetration and Dents With Honeycomb Core Damage, Class VII Damage. See figure 4, sheet 4, section G. Class VII damage is skin and honeycomb core damage, located in zone A1 or A2 but does not exceed limits listed below:

a. Full penetration of one or both skins.

b. Honeycomb core damage is allowable.

c. Diameter is no greater than maximum damage size (figure 2).

d. Damage is located where required patch does not overlap fasteners.

e. Distance between damages is at least four times diameter of largest damage.

f. Edge distance of cleaned-up damaged hole in inner skin shall be no closer than one diameter from edge of honeycomb core ramp, or extend beyond areas where skin is not next to core.

g. The requirements are same for outer skin except core ramp edge distance restriction is not applicable.

h. Dents.

(1) Diameter greater than 3 inches.

(2) Depth greater than 0.05 inches.

(3) Crushed core is allowed.

12. Water in Honeycomb Core, Class VIII Damage. Class VIII damage is water trapped in honeycomb core. For locating water in core (A1-F18AC-SRM-300, WP076 00).

13. Edge Damage, Class IX Damage. See figure 4, section H. Class IX damage is damage which does not exceed limits listed below:

a. Depth less than 0.20 inches.

b. Length less than 4 inches.

c. Edge to edge spacing greater than four times largest crush.

d. Class IV damage not exceeded.

14. REPAIRS.

15. Classes I, II, III, IV, V, VI, VIII and IX are organizational maintenance. Class VII less than 1.5 inches in diameter is organizational maintenance; over 1.5 inches in diameter is intermediate maintenance. Classes I, II, III, IV, V, VI, VII, VIII and IX may be repaired per procedures referenced below:

a. Repair Class I damage (A1-F18AC-SRM-250, WP012 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

b. Repair Class II damage (A1-F18AC-SRM-250, WP013 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

c. Select patch for Class III damage per paragraph 16. Repair Class III damage (A1-F18AC-SRM-250, WP014 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

d. Repair Class IV damage (A1-F18AC-SRM-250, WP015 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

e. Repair Class V damage (A1-F18AC-SRM-250, WP016 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

f. Select patch for Class VI damage per paragraph 16. Repair Class VI damage (A1-F18AC-SRM-250, WP017 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

g. Select patch for Class VII damage per paragraph 16. Repair Class VII damage (A1-F18AC-SRM-250, WP018 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

h. Repair Class VIII damage (A1-F18AC-SRM-250, WP005 00).

i. Repair Class IX damage (A1-F18AC-SRM-250, WP019 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

16. **PATCH SELECTION.** Type of patch to be used depends on class of damage, repair zone, type of adhesive, and damage size. Select applicable patch number for class III damage using table 1, Class VI and VII damage using table 2 or table 3, and limits listed below:

a. When selecting patch for Class VI or Class VII damage, damage occurring in more than one zone must meet requirements of zone with smallest allowable damage size (figure 2). Any damage occurring partially in zone C requires a depot engineering disposition.

NOTE

Titanium patches conform more easily to skin curvature.

b. Required patch must not lap over any abrupt surface break or sharp curvature that may prevent patch from easily conforming to skin surface.

c. Patch may not interfere with structure or cover any countersink fasteners.

d. When selecting patch for Class III damage, patch must overlap injection holes by at least 1/2 inch.

e. Patches exceeding steps a, b, c, or d require depot engineering disposition.

17. **EXCESSIVE DOOR EDGE GAP REPAIR.** See figure 6. Use mating door or manufacture mold block to match configuration of mating door. When filling gap, be sure mold block material will maintain correct shape while curing adhesive at required temperatures.

NOTE

Determine if door edge gap exceeds maximum gap limits, per figure 5.

18. **Gap Repair of Graphite Epoxy Door Sill.**

Support Equipment Required

Nomenclature	Part Number or Type Designation
	None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide Waterproof	A-A-1047 Grit 180 and 240-9 X 11
Adhesive Cheesecloth	EA9321 A/B CCC-C-440 Type 1 Class 1
Cloth, Teflon, Non Porous Release Fabric	TEMP-R-GLAS 6TB
Men's Gloves, Cotton Work Gloves	MIL-G-3866, Type 1, Small or Medium
Metal Spatula, Tongue Depressor	GG-D-226 Type 1
Pressure Sensitive Tape, 1 Inch Wide	855-1.000 IN

a. Prepare sill area to be repaired by sanding with 180 grit then 240 grit abrasive paper.

b. Clean area using clean dry cheesecloth.

c. Mask around outside edge of sill to be repaired with pressure sensitive tape to catch excess adhesive squeezeout.

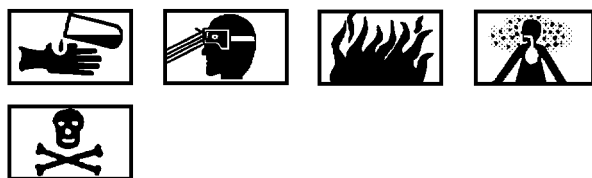


Wear clean cotton gloves when making repairs to avoid contamination of bond surface.

d. Place one layer of release fabric between sill and mating door or mold block.

e. Tape release fabric to door or mold block.

f. Secure door or mold block to sill using C-clamps with back-up plates to prevent damage to door and sill.



Adhesive

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g. Prepare EA9321 A/B adhesive, (A1-F18AC-SRM-200, WP011 00).

h. Apply EA9321 A/B adhesive with spatula, filling gap between sill and door or mold block.

i. Place layer of release fabric over repair area and attach back-up plate to sill using C-clamps to prevent sag of EA9321 A/B adhesive.

j. Cure at room temperature for 2 hours, then remove C-clamps and back-up plate and cure at 190°F ±10°F for 1 hour.

k. Remove pressure sensitive tape from repair area.

l. Clean excess EA9321 A/B adhesive at repair area to maintain trim gap using 240 grit abrasive paper and clean with dry cheesecloth.

m. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

19. Gap Repair of Aluminum Door Sill.

Support Equipment Required

Nomenclature	Part Number or Type Designation
--------------	---------------------------------

None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047 Grit 180 and 240-9 X 11
Adhesive Cheesecloth	EA9321 A/B CCC-C-440 Type 1, Class 1
Chemical Gloves Rubber Gloves	ZZ-G-381, Type 1, Style 1, Small, Medium, Large
Cloth, Teflon, Non Porous Release Fabric	TEMP-R-GLAS 6TB
Men's Gloves, Cotton Work Gloves	MIL-G-3866, Type 1, Small or Medium
Metal Cleaner, Aluminum Cleaning Material	222555
Pressure Sensitive Tape, One Inch Wide	855-1.000 IN
Primer, Adhesive	BR-127
Utility Apron General Purpose Apron	MIL-A-41829
Varnish Brush, Flat, 1/2 Inch to 1 Inch Wide	H-B-695 Type 1 Grade A Size 1-1/2

a. Mask around outside edge of sill to be repaired with pressure sensitive tape.

b. Sand repair area to uniform finish using 240 grit abrasive paper.

c. Wipe surface clean with clean, dry cheesecloth.



Metal Cleaner

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d. Brush apply metal cleaner over exposed surface. Apply metal cleaner at room temperature. To keep metal cleaner from drying out, reapply as required, to keep metal cleaner wet for at least 15 minutes.



Wear clean cotton work gloves when making repairs to prevent contamination.

e. Wipe off metal cleaner with clean, dry cheesecloth.

f. Thoroughly remove any metal cleaner residue from bonding surface using clean cheesecloth saturated with tap water.

g. Check for water break free surface. Repeat steps d through g at least once so surface has been cleaned twice. If after second cleaning, water break occurs, repeat steps d through g until water break free. If water break free after two cleanings, continue to step h.

NOTE

After drying, if repair surface is not primed within 4 hours, cover repair surface with waxfree paper. If repair surface is not primed within 8 hours after cleaning, complete cleaning procedure must be repeated.

h. Remove tape mask. Lightly wipe surface dry with clean cheesecloth. Dry bonding surface using hot air gun for 10 minutes, or allow to air dry for at least 30 minutes.



Adhesive Primer

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NOTE

Primer adhesive must be stirred and mixed before use. Solids in primer adhesive will settle out quickly. Stir primer adhesive continuously while being used. Do not apply primer adhesive liberally to bonding surface.

i. After drying, use clean cheesecloth to make pad for applying primer adhesive. Moisten pad with primer

adhesive and wipe surface to be bonded lightly with pad.

j. Cure primer adhesive for 30 minutes at room temperature, then cure with heat blanket for 1 hour at 225°F ±10°F.

k. Mask around outside edge of sill to be repaired with pressure sensitive tape to catch excess EA9321 A/B adhesive squeezeout.

l. Place one layer of release fabric between sill and mating door or mold back.

m. Tape release fabric to door or mold back.

n. Secure door or mold block to sill using c-clamps with back-up plates to prevent damage to door and sill.



Adhesive

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o. Prepare EA9321 A/B adhesive, (A1-F18AC-SRM-200, WP011 00).

p. Apply EA9321 A/B adhesive with spatula, filling gap between sill and door or mold back.

q. Place layer of release fabric over repair area and attach back-up plate to sill using c-clamps to prevent sag of EA9321 A/B adhesive.

r. Cure at room temperature for 2 hours, then cure at 190°F ±10°F for 1 hour.

s. Remove pressure sensitive tape from repair area.

t. Clean excess EA9321 A/B adhesive at repair area to maintain trim gap, using 240 grit abrasive paper and clean dry cheesecloth.

u. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

20. OUTBOARD EDGE REPAIR, INTERMEDIATE MAINTENANCE. See figure 7.

Support Equipment Required

Nomenclature	Part Number or Type Designation
	None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper	A-A-1047, Grit 240-9 X 11
Adhesive	EA956
Cloth, Nylon, Scrim	Pattern 30
Graphite Cloth	
Lubricant,	MS122
Fluorocarbon	
Pressure Sensitive	855-1.000 IN
Tape, 1 Inch Wide	
Sheet, Plastic	200SG40TR2 Mil Thick

a. Remove MLG inboard door (A1-F18AC-130-300, WP047 00).

b. Determine if damage is within repairable limits. Damage exceeding limits below require depot engineering disposition.

(1) Length does not exceed 8 inches.

(2) Distance between damages at least 4 inches.

(3) Damage does not exist within 6 inches of leading edge or within 2 inches of trailing edge.

(4) After trimming damage, at least 0.2 inch of original bondline between honeycomb core and trimmed edge is intact.

c. Trim damage as shown. For trimming (A1-F18AC-SRM-200, WP004 08).

d. Do NDI to make sure 0.2 inch of original bondline between honeycomb core and trimmed edge is intact. If 0.2 inch does not exist, depot engineering disposition is required. For NDI (A1-F18AC-SRM-300, WP005 00).

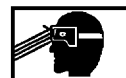


To prevent more damage, do not sand into base material of door when removing finish.

e. Remove surface finish where inner and outer mold line plies will be bonded.

f. Determine number of filler plies required by measuring step depth. If step depth is less than 0.030 inch, one filler ply is required on each step. If step depth is more than 0.030 inch, two filler plies are required on each step.

g. Place graphite cloth on layer of tedlar film.



Adhesive

4

h. Saturate enough cloth with EA956 adhesive to fabricate number of filler plies determined in step f.

i. Place another layer of tedlar film over cloth and work EA956 adhesive into cloth.

NOTE

If four filler plies are required, cut inner plies at 45° and outer plies at 0° orientation.

j. Cut cloth to size and orientation. Allow 0.50 inch excess material for final trimming.



To prevent damage to door, make sure inner mold line backup plate does not rest on core ramp or recess edge.

k. Fabricate two backup plates as required to cover repair area.



Release Agent



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l. Apply release agent to surface of backup plates that will mate door.

m. Secure outer mold line backup plate into position with tape.

n. Lay filler plies in position.



To prevent damage, make sure clamps are not installed directly over filler plies.

o. Position and clamp inner mold line backup plate to outer mold line backup plate.

p. Cure repair by air cure for 5 hours or heat blanket (A1-F18AC-SRM-250, WP004 00).

q. Remove clamps and backup plates.

NOTE

Do not remove excess edge material.

r. Sand surfaces smooth.

s. Saturate enough graphite cloth with EA956 adhesive to fabricate inner and outer mold line plies.

t. Cut graphite cloth to size and orientation for inner and outer mold line plies. Allow 0.50 excess material for final trimming.

u. Cut scrim cloth to same size as inner and outer plies.

v. Apply EA956 adhesive to inner and outer mold line bonding surfaces.

w. Lay scrim cloth on wet EA956 adhesive.

x. Position inner and outer mold line plies.

y. Cure repair using AM-D-O-MDA1S1-101, -103, -105, or -107 heat/vacuum blanket (Detail F and A1-F18AC-SRM-250, WP004 00).

z. Sand forward and aft ends of inner mold line ply flush with existing mold line.

aa. Trim excess material from repair edge. Trimming (A1-F18AC-SRM-200, WP004 08).

ab. Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

ac. Install MLG inboard door (A1-F18AC-130-300, WP047 00).

21. **FORWARD HINGE HALF, REPAIR.** See figure 8. When loose screws/nuts attaching hinge half to door, cracked sealant between hinge half and door, or general looseness of hinge/half door exist, repair as below:

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 120 Inch-Pounds	-



Epoxy Primer

9

Materials Required

NOTE

Alternate item part numbers are shown indented.

Nomenclature	Specification or Part Number
Nut, Double Hexagon, Self Locking	LH10874-4 (HW49660-4) (LH11434-4)
Coating, Primer	MIL-P-23377 Type 1, Class 1
Screw, Close Tolerance, 100° Countersink	HT4025L4-21
Screw, Close Tolerance, 100° Countersink	HT4025L4-23
Sealant Scraper	-
Sealing Compound	MIL-S-8802 (PR1422)
Sheet, Plastic	L-P-513-T4-PBG 0.875

a. Remove four screws holding hinge half to door.

b. Remove hinge half from door.

c. Remove old sealant from door and hinge half with sealant scraper.

d. Check 74A426030-2003/-2011 shims installed between hinge half and mating surface of door. Determine if gap exists between mating surface of hinge half, installed shims, and mating surface of door.

e. If gap exists, remove and discard shims. Install new 74A426030-2003/-2011 shims as needed. Peel laminar shims as needed to minimize or eliminate gaps between door surface and hinge half. Trim shims as needed to fit.

f. Off aircraft, match drill 0.250 inch +0.010/-0.000 inch, diameter fastener holes from hinge half thru shims. Break all sharp edges. Apply single coat of MIL-P-23377, Type 1, Class 1, primer to all surfaces of shims after drilling. For primer preparation and application, refer to A1-F18AC-SRM-500, WP011 00 for instruction.

g. Solvent clean mating surface of door and hinge half (A1-F18AC-SRM-500, WP006 00).

h. Fay seal mating surface of door/hinge half (A1-F18AC-SRM-500, WP006 00).



Sealing Compound

6

i. Secure shims and hinge to door mating surface. Wet install fasteners with sealing compound. Add or remove NAS1149F0463P washer as needed.

j. Torque nuts, 70 to 100 inch-pounds. Minimum of two bolt threads must extend from installed nut after torque.

k. Refinish (A1-F18AC-SRM-500, WP042 00).

22. FORWARD OUTBOARD CORNER REPAIR, INTERMEDIATE MAINTENANCE. See figure 9.

Support Equipment Required

Part Number or Type Designation	Nomenclature
250 Watt Infrared Heat Source	-
Tool Set-Structural Repair, Composite Materials	74D110172-1001

Materials Required

Specification or Part Number	Nomenclature
Abrasive Paper	A-A-1047 Grit 240, 320-9 X 11
Adhesive	EA956
Adhesive	EA9321 A/B
Aluminum Backup Plate, 5" X 5"	-
C-Clamps	-
Cheesecloth	CCC-C-440 Type 1 Class 1
Cleaning Compound Cloth, Dry Woven Graphite	MIL-C-38736 W133
Cloth, Satin Glass Cloth	MIL-C-9084 Type 8, Class 2
Cloth, Teflon	TEMP-R-GLAS 6TB
Fastener, 2 Reqd.	HL613-5
Fluorocarbon Lubricant, Release Agent, Teflon	MS122
Glass Floc, 1/32 Inch Milled Glass Fibers	-
Mylar Film, Polyester 0.014 inch thick 10 inch x 34 inch	Mylar-Type A
Pressure Sensitive Tape, 1 Inch Wide	855-1.000 IN
Squeegie, Teflon	-
Tedlar Film	200SG40 TR, 2 Mil Thick
X-Acto Knife	-

a. Remove MLG inboard door (A1-F18AC-130-300, WP047 00).

b. Determine if damage is within repairable limits. Damage exceeding limits below require depot engineering disposition.

(1) After trimming damage, at least 0.2 inch of original bondline between honeycomb core and trimmed edge is intact.

(2) Limits; shown on figure should not be exceeded.

c. Trim damage as shown. For trimming (A1-F18AC-SRM-200, WP004 08).

d. Radius sharp corners to 0.020 +0.020 -0.000.

e. Do NDI to make sure 0.20 inch of original bondline between honeycomb core and trimmed edge is intact. If 0.20 inch does not exist, depot engineering disposition is required. For NDI (A1-F18AC-SRM-300, WP005 00).

f. Inspect area for delaminations (A1-F18AC-SRM-300, WP076 02).

g. If delaminations exist, inject delaminations (A1-F18AC-SRM-250, WP015 00).

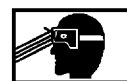
h. Do NDI on injection repair (A1-F18AC-SRM-300, WP076 02).

i. Remove ST3M419V08 fastener if located in repair patch area.



To prevent more damage, do not sand into base material of door when removing finish.

j. Remove surface finish by sanding, where inner and outer mold line plies will be bonded.



Adhesive

4

k. Coat trimmed edges with adhesive EA956 (A1-F18AC-SRM-200, WP011 00).

l. Use hand sander, X-acto knife, or router to step cut inner surface of assembly as shown to depth of 0.014 inch constant. This will allow for overlap of filler repair ply.

m. Fabricate aluminum backup plate for outer skin at least 5 inch by 5 inch.

n. Fabricate aluminum backup plate for inner skin in "L" shape to similar size as trimmed section of door. Allow at least one inch of overlap of backup plate beyond single ply step on inner mold line surface.

o. Fabricate filler plies from dry woven graphite cloth.

p. Make wet lay up assembly using EA956 adhesive. Filler will consist of enough plies to match

thickness of removed material. All plies are to be at zero degrees orientation which is parallel to outboard edge of MLG door. All but one ply is to be trimmed to "L" shape. Remaining ply will fit stepped cut out on inner mold line surface.

q. Prepare EA956 (A1-F18AC-SRM-250, WP003 00).

r. Saturate layer of dry woven graphite cloth with EA956 adhesive, which has been placed on sheet of Type A, 0.014 inch thick mylar film.

s. Place second sheet of mylar film over saturated cloth and roll material between mylar sheets to work adhesive into cloth.

t. Cut repair plies to required size and orientation.



To prevent damage to door, make sure inner skin backup plate does not rest on core ramp or recess edge.



Release Agent



14

u. Apply fluorocarbon lubricant, release agent to surface of backup plates that will mate door.

v. Secure outer skin backup plate into position with tape.

w. Lay filler plies in position.



To prevent damage, make sure clamps are not installed directly over ply step or honeycomb core.

x. Locate and clamp inner skin backup plate to outer skin caul plate with C-clamps.

y. Cure repair by air cure method for five hours or heat blanket (A1-F18AC-SRM-250, WP004 00).

z. Remove C-clamps and backup plates.

aa. Do NDI on repair (A1-F18AC-SRM-300, WP008 01).

ab. Rebuild fiberglass rub strip to specified thickness, (161353 THRU 161761).

(1) Determine thickness of damaged strip.

(2) Use enough plies of glass cloth to make repair same thickness as damaged trip.

(3) Cut cloth large enough to allow for final trimming to exact size.

(4) Prepare EA956 adhesive (A1-F18AC-SRM-250, WP003 00).

NOTE

Cover layup table with TEMPRGLAS6TB teflon cloth to prevent saturated glass cloth from sticking to layup table.

(5) Place first ply of glass cloth on clean layup table. Spread adhesive on glass cloth thoroughly saturating all area of glass cloth using a squeegee.

(6) Spread thin layer of EA956 adhesive over repair surface.

(7) Lay up the saturated glass cloth by strip on door.

(8) Repeat step 5 for remaining plies.

(9) Lay up remaining saturated glass cloth plies over first ply.

(10) Cover repair with tedlar film; work out air bubbles and excess adhesive.

(11) Using X-acto knife cut repair to size.

(12) Cure repair for 1 hour using 250 watt infrared heat source.



Use care not to sand into skin plies causing extra damage.

(13) Sand repair area lightly using 240 grit abrasive paper to remove surface roughness.

(14) Do NDI on repair (A1-F18AC-SRM-300, WP008 01).

ac. If ST3M419V08 fastener was removed, fill hole and countersink with EA9321 A/B and glass floc.



Adhesive

11

(1) Combine 100 parts by weight EA9321 A/B part A, with 50 parts by weight EA9321 A/B part B, and 10 parts by weight glass floc.

(2) Mix thoroughly to putty consistency.



Cleaning Compound

15

(3) Clean hole with cheesecloth moistened with MIL-C-38736 cleaning compound.

(4) Wipe dry with clean dry cheesecloth.

(5) Sand lightly with 320 grit abrasive paper.

(6) Vacuum clean hole.

(7) Apply tape on inner moldline side of hole to trap filler material.

(8) Apply filler material to hole and countersink.

(9) Cure filler at 190° F for 1 hour with heat blanket (A1-F18AC-SRM-250, WP004 00) or air cure at room temperature for 2 hours.

(10) Sand filler material flush to outer moldline with 240 grit abrasive paper.

(11) Drill hole in patch to 0.1640 +0.0040 -0.0000 diameter at original fastener location (A1-F18AC-SRM-200, WP004 08).

(12) Countersink hole (A1-F18AC-SRM-200, WP004 08).

(13) Drill hole for new fastener in patch at 1.0 inch outboard of original fastener hole (A1-F18AC-SRM-200, WP004 08).

(14) Countersink new hole (A1-F18AC-SRM-200, WP004 08).

(15) Install both HL613-5 fasteners. Determine length as required for repair patch thickness.

ad. Fabricate precured externally bonded patch from woven graphite cloth in a wet layup assembly with EA956 adhesive:

(1) To reduce repair time, patch can be precured on spare MLG door during cure cycle of filler repair.

(2) Clean repair area with cheesecloth moistened with MIL-C-38736 cleaning compound.

NOTE

Patch is rectangular and will extend 2 inches beyond original trimmed area.

(3) Tape one layer of mylar film on outer skin of door.

(4) Lay up three plies at 45°, 0°, and 45° orientation. Zero degrees is parallel to outboard edge of MLG door.

(5) Prepare EA956 (A1-F18AC-SRM-250, WP003 00).

(6) Cut enough graphite cloth to make plies.

(7) Saturate graphite cloth with EA956 adhesive.

(8) Lay plies to correct orientation.

(9) Lay a sheet of mylar film over plies.

(10) Use squeegee to work adhesive into cloth and work out air bubbles.

(11) Cure patch using heat blanket and same procedure used for EA9321 A/B adhesive bonded patch repair (A1-F18AC-SRM-250, WP007 00).

(12) Sand constant taper around periphery of patch, one half inch wide to an edge thickness of 0.010 +0.000 -0.010 inch.

(13) Bond precured patch to outer skin with EA9321 A/B adhesive, (A1-F18AC-SRM-250, WP007 00).

(14) Do NDI on repair (A1-F18AC-SRM-300, WP008 01).

ae. Reinstall MLG inboard door (A1-F18AC-130-300, WP047 00).

23. AFT OUTBOARD CORNER REPAIR, INTER-MEDIATE MAINTENANCE. See figure 10.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source	-
Tool Set-Structural Repair, Composite Materials	74D110172-1001

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper	A-A-1047 Grit 240, 320-9 X 11
Adhesive	EA956
Adhesive	EA9321 A/B
Aluminum Backup Plate, 5" X 5"	-
C-Clamps	-
Cheesecloth	CCC-C-440 Type 1 Class 1
Cleaning Compound	MIL-C-38736
Cloth, Dry Woven Graphite	W133
Cloth, Nylon	Pattern 30
Cloth, Satin	MIL-C-9084 Type 8
Breather Cloth	Class 2
Cloth, Teflon	TEMP-R-GLAS 6TB
Mylar Film, Polyester	Mylar-Type A
0.014 inch thick	
Patch- Repair, graphite epoxy, precured, left	74K000002
Pressure Sensitive Tape, 1 Inch Wide	855-1.000 IN
Release Tape, Flashlease 2	A4000
Sheet, Plastic	200SG40 TR, 2 Mil Thick
X-Acto Knife	-

a. Remove MLG inboard door (A1-F18AC-130-300, WP047 00).

b. Determine if damage is within repairable limits. Damage exceeding limits shown in figure require depot engineering disposition.

c. Trim damage as shown. For trimming (A1-F18AC-SRM-200, WP004 08).

d. Radius sharp corners to 0.020 +0.020°ba -0.000°ba.

e. Inspect area for delaminations (A1-F18AC-SRM-300,WP076 02).

f. If delaminations exist repair delaminations (A1-F18AC-SRM-250, WP015 00).

g. Do NDI on injection repair (A1-F18AC-SRM-300, WP076 02).

h. Trim unbonded outer mold line skin of outboard aft corner, if required, to a constant radius, pie shaped arc.

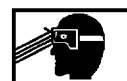
i. Visually inspect honeycomb core for crushed core damage.

j. Remove damaged core and repair per A1-F18AC-SRM-250, WP021 01).



To prevent more damage, do not sand into base material of door when removing finish.

k. For corner replacement remove surface finish by sanding with 240 grit abrasive paper where inner and outer mold line plies will be bonded.



Adhesive

4

l. Prepare EA956 (A1-F18AC-SRM-250, WP003 00).

m. Coat trimmed edges with adhesive (A1-F18AC-SRM-200, WP011 00).

n. Use hand sander, X-acto knife, or router to step cut inner surface of assembly as shown to depth of 0.014 inch constant. This will allow for overlap of inner mold line patch.

o. Fabricate aluminum backup plate for outer skin at least 5 inch by 5 inch.

p. Fabricate aluminum backup plate for inner skin in "L" shape to similar size as trimmed section of door. Allow the backing plate to extend past trim line, into single ply step on inner mold line surface.

q. Fabricate filler plies from dry woven graphite cloth.

r. Make wet lay up assembly using EA956 adhesive. Filler will consist of enough plies to match thickness of removed material. All plies are to be at zero degrees orientation which is parallel to outboard edge of MLG door. All plies to be trimmed to an "L" shape.

s. Saturate a layer of dry woven graphite cloth with EA956 adhesive, which has been placed on a sheet of mylar film.

t. Place a second sheet of mylar film over saturated cloth and roll material between mylar sheets to work adhesive into cloth.

u. Cut repair plies to required size and orientation.



To prevent damage to door, make sure inner skin backup plate does not rest on core ramp or recess edge.



Release Agent

14

v. Apply fluorocarbon lubricant to surface of back-up plates that will mate door.

w. Secure outer skin backup plate in position with tape.

x. Lay filler plies in position.



To prevent damage, make sure clamps are not installed directly over ply step or honeycomb core.

y. Locate and clamp inner skin backup plate to outer skin caul plate with C-clamps.

z. Cure repair by air cure method for 5 hours or heat cure for 1 hour (A1-F18AC-SRM-250, WP004 00).

aa. Remove C-clamps and backup plates.

ab. Do NDI on repair (A1-F18AC-SRM-300, WP008 01).

ac. If outer skin has been removed, fabricate filler patch.

(1) Using slave inboard MLG door as a tool, tape one layer of release tape over outboard aft corner area.

(2) On slave door, fabricate 3-ply filler patch with Fiberite W133 dry woven cloth in wet layup with EA956 adhesive. Ply orientation to be 45/0/45 degrees. Zero degree is parallel to outboard edge.

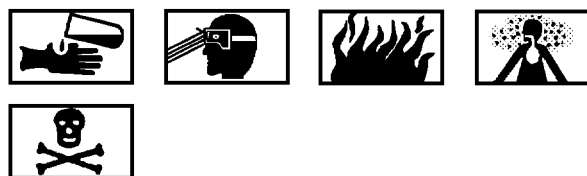
(3) Cure patch by air cure method for 5 hours or heat cure for 1 hour (A1-F18AC-SRM-250, WP004 00).

(4) Remove patch from slave MLG door.

ad. Cut an arc-shaped external patch from 6-ply graphite epoxy precured patch from kit, 74K000002. Damage removal area minimum of 2 inches.

ae. Fabricate inner skin patch from dry woven cloth saturated with EA956 adhesive.

af. Cut patch to fit in inner skin step cuts and to extend up ramp area.



Adhesive

11

ag. Install three ply precured filler patch in outer skin cutout area with EA9321 A/B adhesive.

ah. Position external patch over filler patch with EA9321 adhesive and nylon cloth bond line.

ai. Install wet inner skin patch over inner skin corner.

aj. Cure all bond lines using vacuum bag (A1-F18AC-SRM-250, WP007 00).

ak. Trim aft and outboard edges of repair to existing door edge.

al. Sand a constant taper around periphery of outer skin patch 1/2 inch wide to thickness of 0.010 inch.

am. Lightly sand edges of inner skin patch with 320 grit abrasive paper.

an. Remove sanding dust with clean dry cheese-cloth.

ao. Do NDI on inner and outer skin repair patches to verify bond line integrity (A1-F18AC-SRM-300, WP008 02).

ap. Rebuild fiberglass rub strip to specified thickness, (161353 THRU 161761).

(1) Determine thickness of damaged strip.

(2) Use enough plies of glass cloth to make repair same thickness as damaged strip.

(3) Cut cloth large enough to allow for final trimming to exact size.

(4) Prepare EA956 adhesive (A1-F18AC-SRM-250, WP003 00).

NOTE

Cover layup table with TEMPRGLAS6TB teflon cloth to prevent saturated glass cloth from sticking to layup table.

(5) Place first ply of glass cloth on clean layup table. Spread adhesive on glass cloth thoroughly saturating all area of glass cloth using a squeegee.

(6) Spread thin layer of EA956 adhesive over repair surface.

(7) Lay up the saturated glass cloth by strip on door.

(8) Repeat step 5 for remaining plies.

(9) Lay up remaining saturated glass cloth plies over first ply.

(10) Cover repair with plastic sheet; work out air bubbles and excess adhesive.

(11) Using X-acto knife cut repair to size.

(12) Cure repair for 1 hour using 250 watt infrared heat source.



Use care not to sand into skin plies causing extra damage.

(13) Sand repair area lightly using 320 grit abrasive paper to remove surface roughness.

(14) Do NDI on repair (A1-F18AC-SRM-300, WP008 01).

(15) Reinstall MLG inboard door (A1-F18AC-130-300, WP047 00).

24. INBOARD EDGE REPAIR, INTERMEDIATE MAINTENANCE. See figure 11.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source	-

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper	A-A-1047 Grit 240-9 X 11
Adhesive	EA956
Hypodermic Syringe, No. 15	GG-N-196
Methyl Isobutyl Ketone (ACS Grade)	ASTM D1153 Per O-C-265 (6810-00-052-1371)

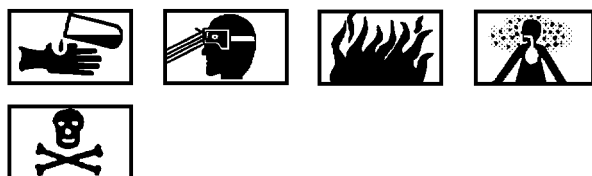
a. Remove MLG inboard door (A1-F18AC-130-300, WP047 00).

b. Determine if damage is within repairable limits. Damage exceeding limits below require depot engineering disposition.

(1) Damage is delamination of inner or outer skin plies or disbond between skin and former.

(2) Damage may extend between hinges, but may not be closer than 0.75 inch to either hinge.

(3) Delamination or disbond may not extend over honeycomb core.



Methyl Isobutyl Ketone

16

c. Clean out delamination using a hypodermic syringe to inject methyl isobutyl ketone.

d. Dry delamination using a 250 Watt infrared heat source.



Adhesive

4

e. Inject EA956 adhesive into delamination, (A1-F18AC-SRM-250, WP015 00).

f. Do NDI on repair (A1-F18AC-SRM-300, WP076 02).

g. Sand area to a smooth finish with 240 grit abrasive paper.

h. Finish (A1-F18AC-SRM-500, WP042 00).

i. Reinstall MLG inboard door (A1-F18AC-130-300, WP047 00).

25. REPLACEMENT.

26. Door is spared with excess trim.

a. Replace door (A1-F18AC-130-300, WP047 00).



b. Trim door to maintain trim gap. See Figure 5. For trimming (A1-F18AC-SRM-200, WP004 08).

c. Refinish if required (A1-F18AC-SRM-500, WP042 00).

Table 1. Patch Selection for Class III Damage

Injection Hole Spacing	Graphite Epoxy Single Patch		Titanium Patch Single Patch	
	No.	Dia.	No.	Dia.
0.50 to 1.25	-1003	2.25	-	-
1.25 to 1.75	-1001 or -1005	2.75	-2001	2.75
1.75 to 2.00	-	-	-2003	3.00
2.00 to 3.00	-1007	4.00	-2005	4.00
NOTES 1. For graphite epoxy patch only FM300 shall be used. Either EA9321 A/B or FM300 adhesive may be used for titanium patch. Dash number of 74K000002 kit. Dash number of 74K000003 kit.				

Table 3. Patch Selection for Repair Zone A2, Graphite Epoxy and Titanium Patches

Damage Size (Dia)	Graphite Epoxy Single Patch		Titanium Patch Two Patches	
	 No.	Dia.	 No.	Dia.
0.0 to 0.25	-1005	2.75	-2003 -2001	3.50
0.25 to 1.50	-1007	4.00	-2005 -2003	4.00
1.50 to 2.75	-1009	5.25	-2009 -2007	5.25
2.75 to 4.00	-1011	6.50	-2013 -2011	6.50
4.00 to 5.25	-1013	7.75	-2017 -2015	7.75
5.25 to 6.00	-1015	9.00	-2021 -2019	9.00

NOTES

1. For graphite epoxy patch only FM300 shall be used. Either EA9321 A/B or FM300 adhesive may be used for titanium patch.

 Dash number of 74K000002 kit.

 Dash number of 74K000003 kit.

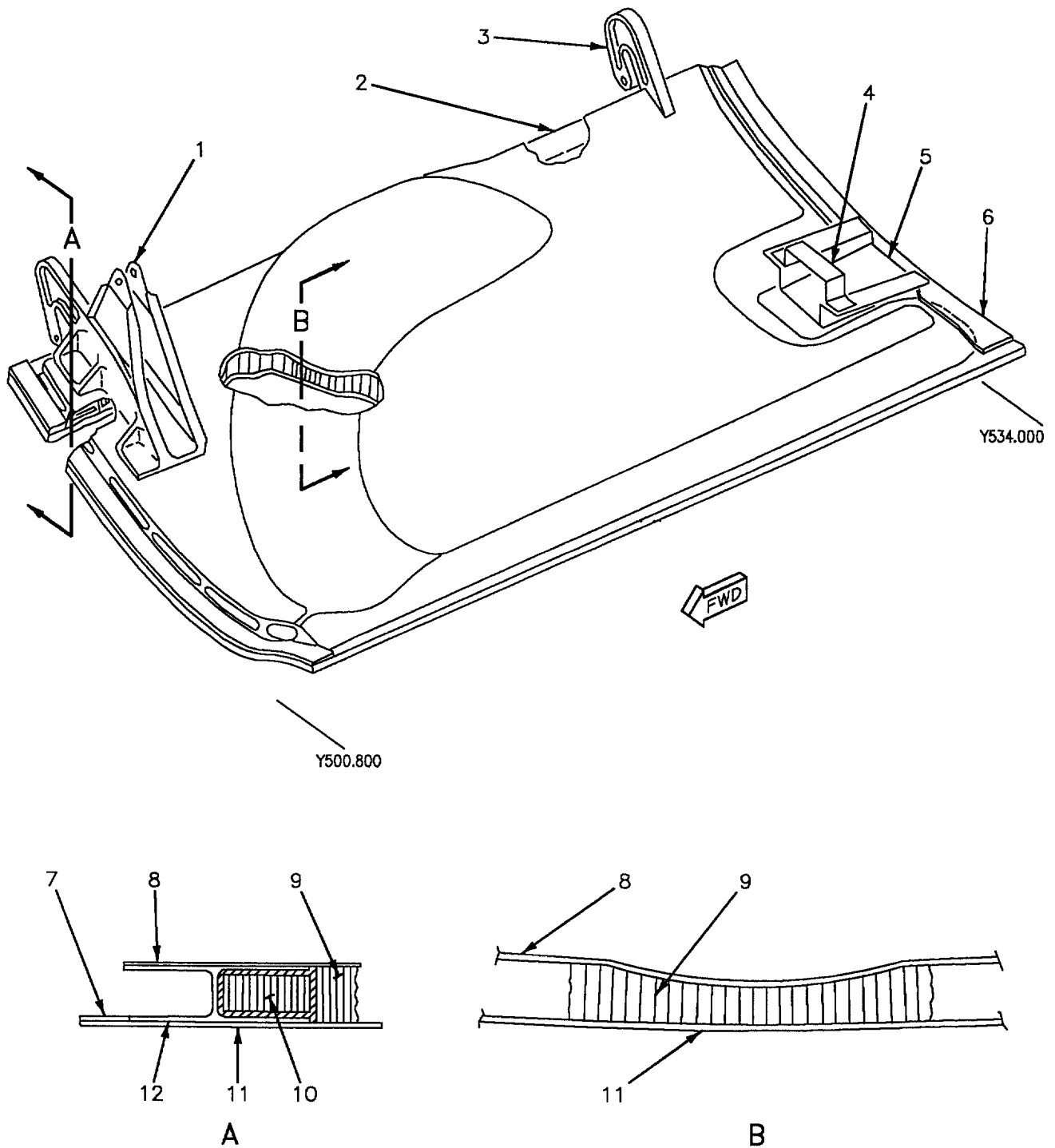


Figure 1. Material Index (Sheet 1)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Hinge Half 74A426031-2003, -2004	Forging	7075-T7352 Al Aly
2	<div>10</div> <div>15</div> <div>9</div> <div>16</div> <div>12</div> <div>23</div>	Former 74A426043-1001 74A426043-1002 74A426043-1005 74A426043 1006 74A426043-1019, -1020 74A426043-1021, -1022	<div>6</div>	<div>6</div>
3		Hinge Half 74A426034-2011, -2012	Forging	7075-T73 Al Aly
4	<div>22</div>	Bracket 74A885602-1215	0.063 Sheet	6061-T4 Al Aly
5		Bracket 74A885627-2003	0.063 Sheet	6061-T62 Al Aly
6	<div>27</div> <div>28</div> <div>7</div>	Rub Strip 74A426040-2007 74A426040-2029 74A426040-2047	<div>5</div>	<div>5</div>
7	<div>3</div> <div>8</div>	Rub Strip 74A426040-2009 74A426040-2031	<div>5</div>	<div>5</div>
8	<div>3</div> <div>8</div> <div>17</div> <div>18</div> <div>14</div> <div>25</div> <div>26</div> <div>23</div>	Skin, Inner 74A426040-1011, -1012 74A426040-1013, -1014 74A426040-1015, -1016 74A426040-1017, -1018 74A426040-1019, -1020 74A426040-1023, -1024 74A426040-1025, -1026 74A426040-1027, -1028	<div>1</div> Sheet	Graphite Epoxy Laminate
9	<div>3</div> <div>4</div> <div>24</div>	Core 74A426042-2005, -2006 74A426042-2007, -2008 74A426042-2009, -2010	<div>21</div> Sheet	5056 Aluminum Honeycomb
10		Plug 74A426042-2003	<div>2</div> Sheet	5056 Aluminum Honeycomb
11	<div>11</div> <div>7</div>	Skin, Outer 74A426041-1003, -1004 74A426041-1007, -1008	<div>1</div> Sheet	Graphite Epoxy Laminate

Idx No.	Eft	Nomenclature and Part No.	Description	Material
12	<div>13</div> <div>19</div> <div>20</div>	Former 74A426044-2005, -2006 74A426044-9001, -9002 74A426044-2007, -2008	Forging	6Al-4V Ti Anl
<p style="text-align: center;">LEGEND</p> <div>1</div> Skin is made of graphite epoxy laminate. <div>2</div> Eighty cells per foot, 0.002 inch thick foil. <div>3</div> 161353 THRU 161525. <div>4</div> 161526 THRU 162444. <div>5</div> Rub strip is made of glass fabric laminate. <div>6</div> Former is made of graphite epoxy laminate. <div>7</div> 161924 AND UP. <div>8</div> 161526 THRU 161761. <div>9</div> 161353 THRU 161748. <div>10</div> 161749 THRU 161928 AND 161932. <div>11</div> 161353 THRU 161761. <div>12</div> 161929 THRU 161931 AND 161933 THRU 163152. <div>13</div> 161353 THRU 161958. <div>14</div> 161959 THRU 162444. <div>15</div> 161761 THRU 161928 AND 161932. <div>16</div> 161353 THRU 161760. <div>17</div> 161924 THRU 161928 AND 161932. <div>18</div> 161929 THRU 161931 AND 161933 THRU 161958. <div>19</div> 161959 THRU 162414. <div>20</div> 162415 AND UP. <div>21</div> Eighty cells per foot, 0.0014 inch thick foil. <div>22</div> 163092 THRU 163175. <div>23</div> 163153 AND UP. <div>24</div> 162445 AND UP. <div>25</div> 162445 THRU 163109. <div>26</div> 163110 THRU 163152. <div>27</div> 161353 THRU 161361. <div>28</div> 161362 THRU 161761.				

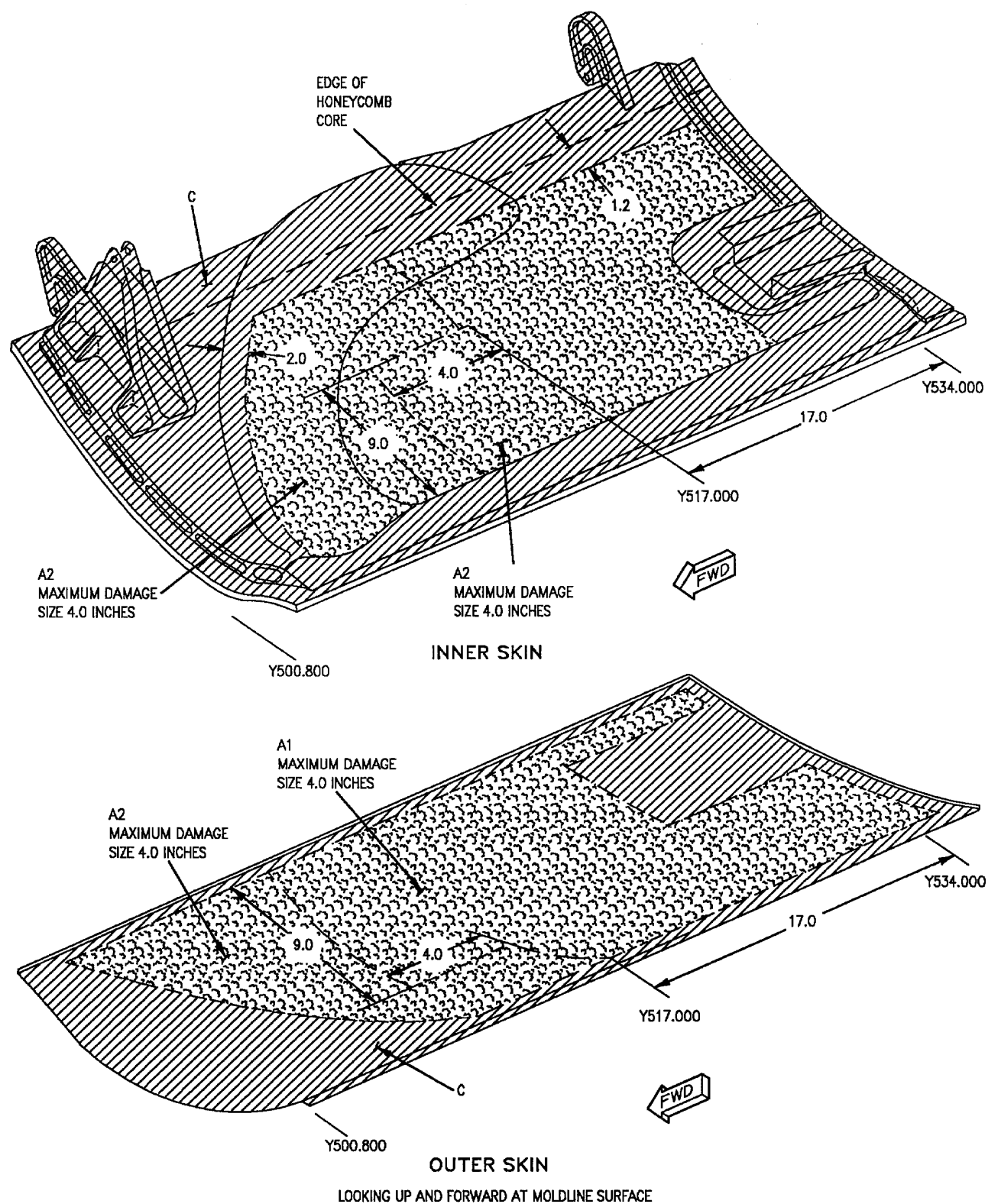


Figure 2. Repair Zones

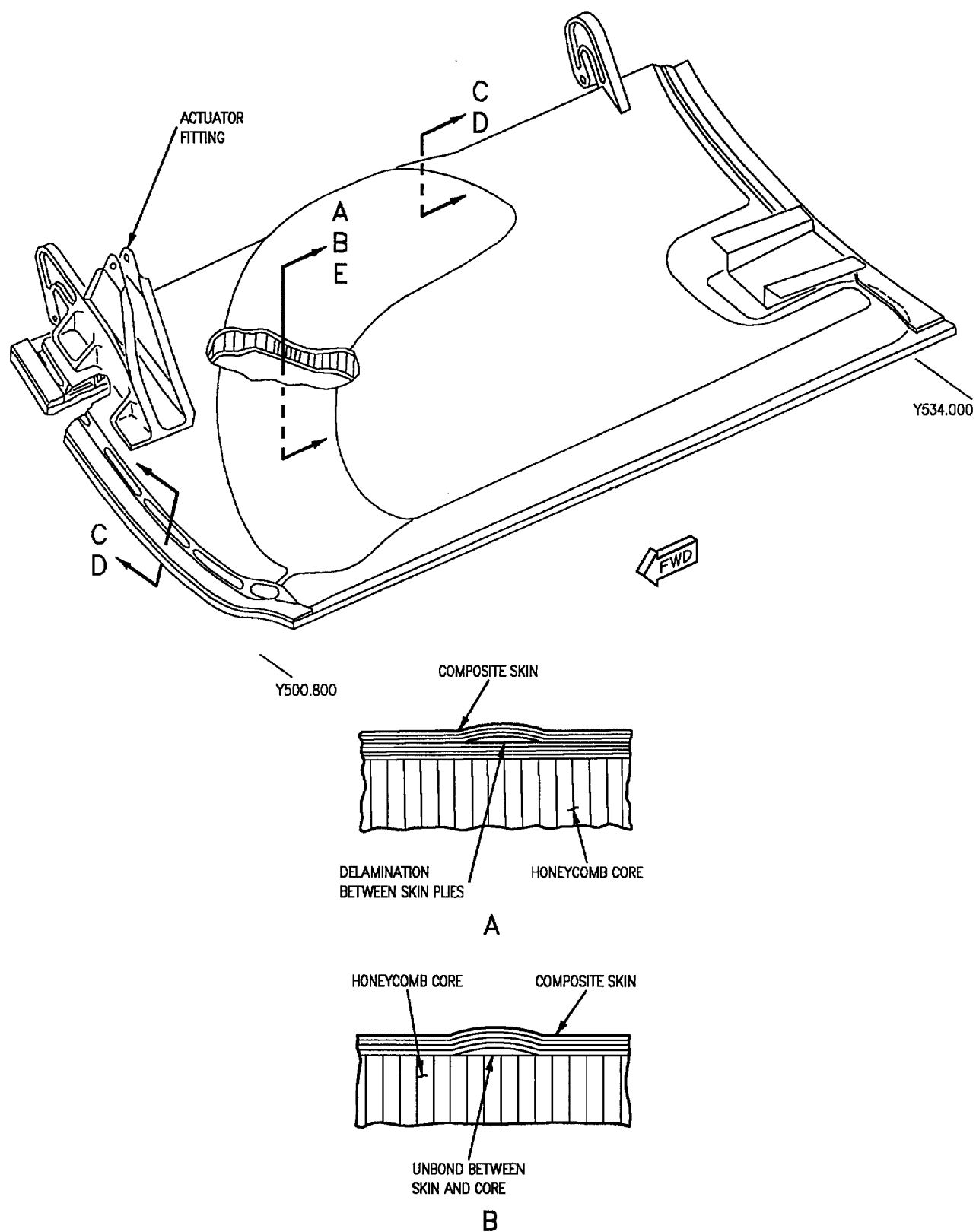


Figure 3. Negligible Damage (Sheet 1)

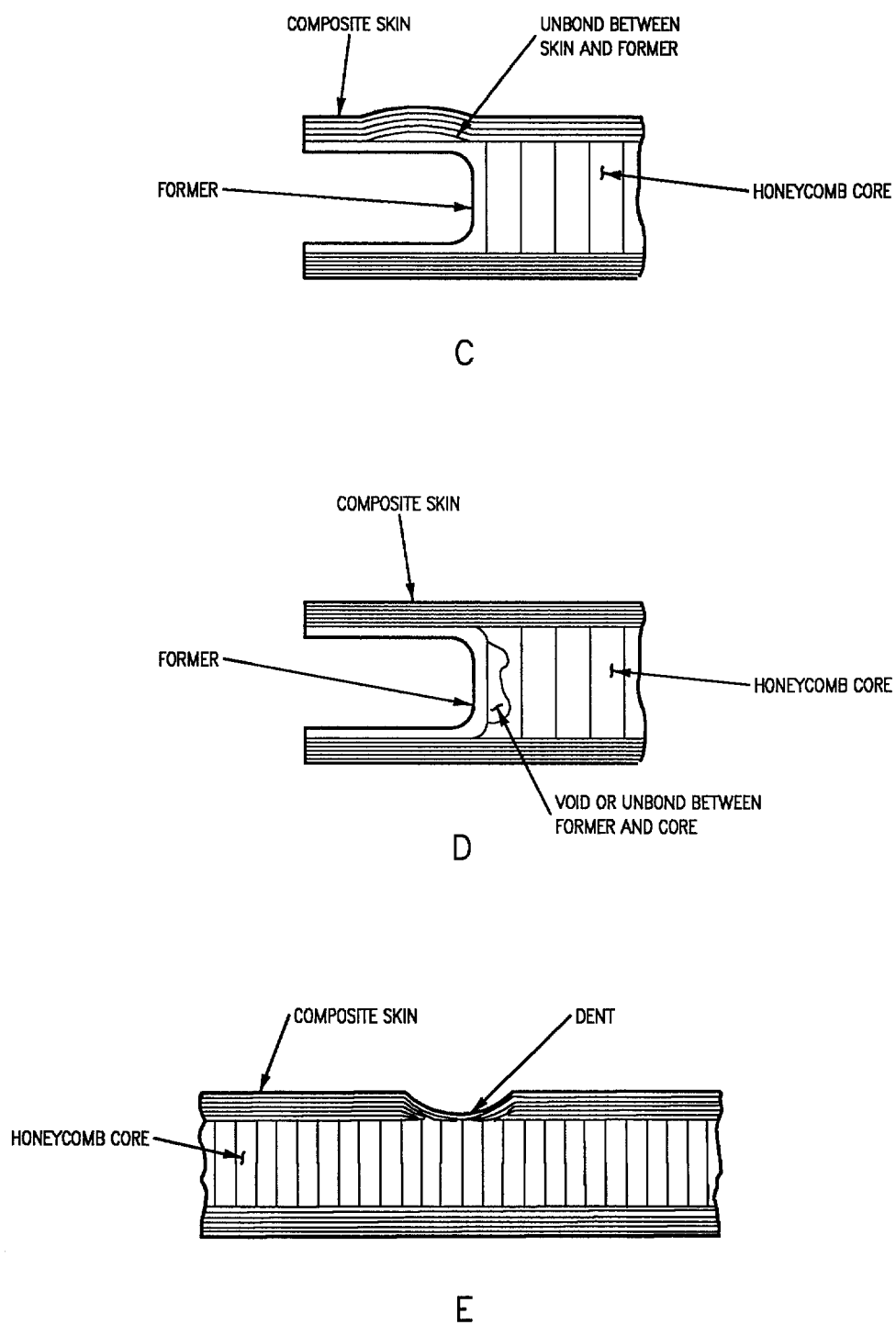
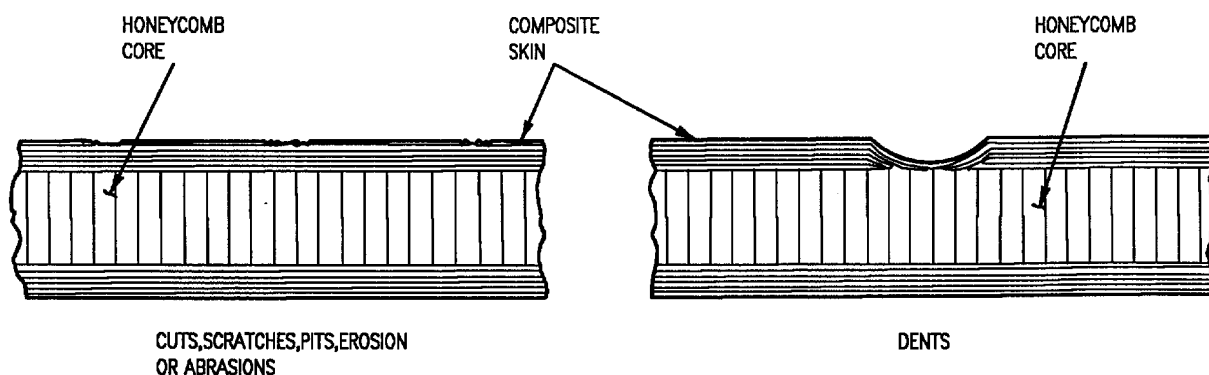
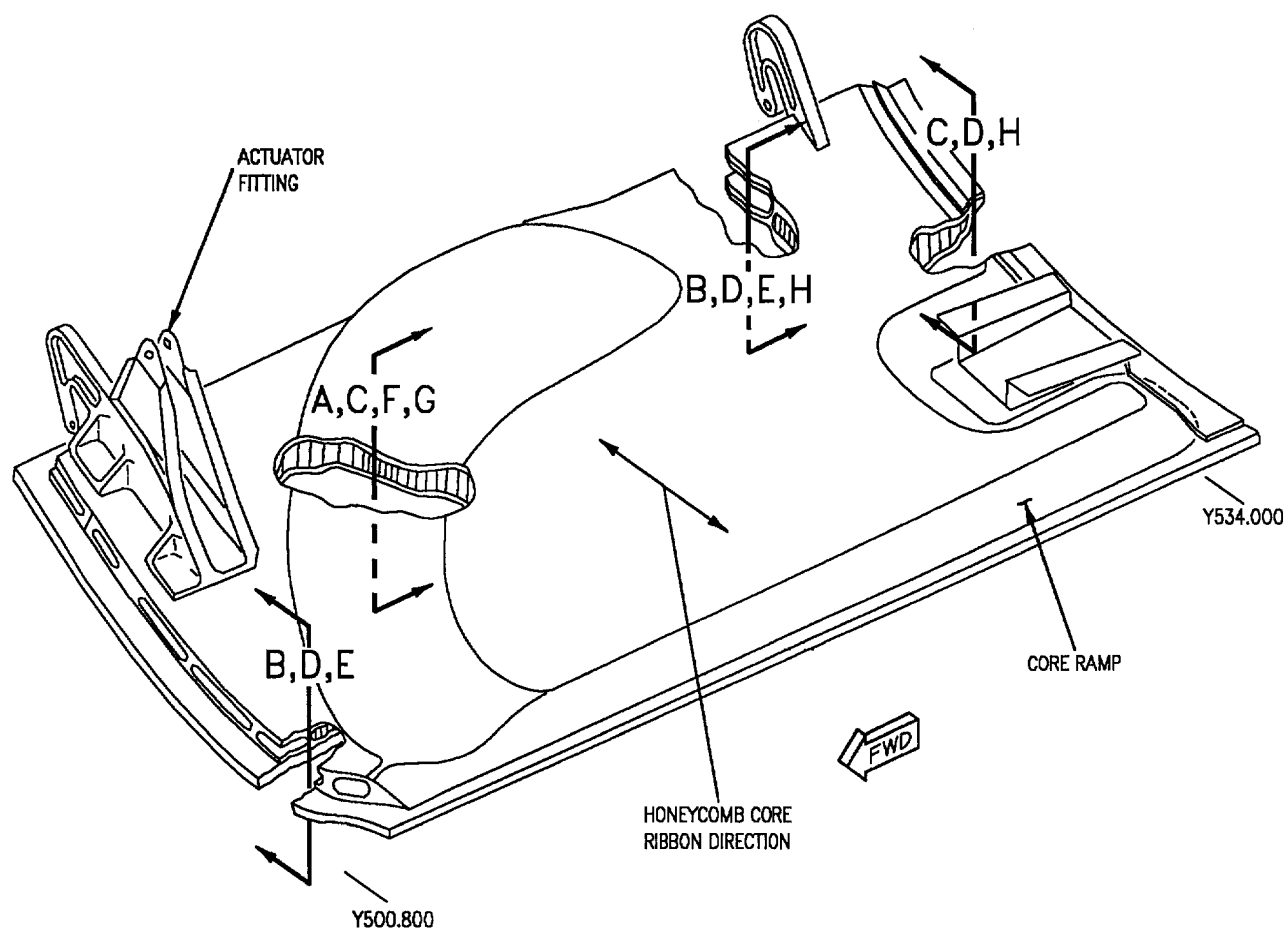


Figure 3. Negligible Damage (Sheet 2)



CLASS I DAMAGE
A

Figure 4. Repairable Damage (Sheet 1)

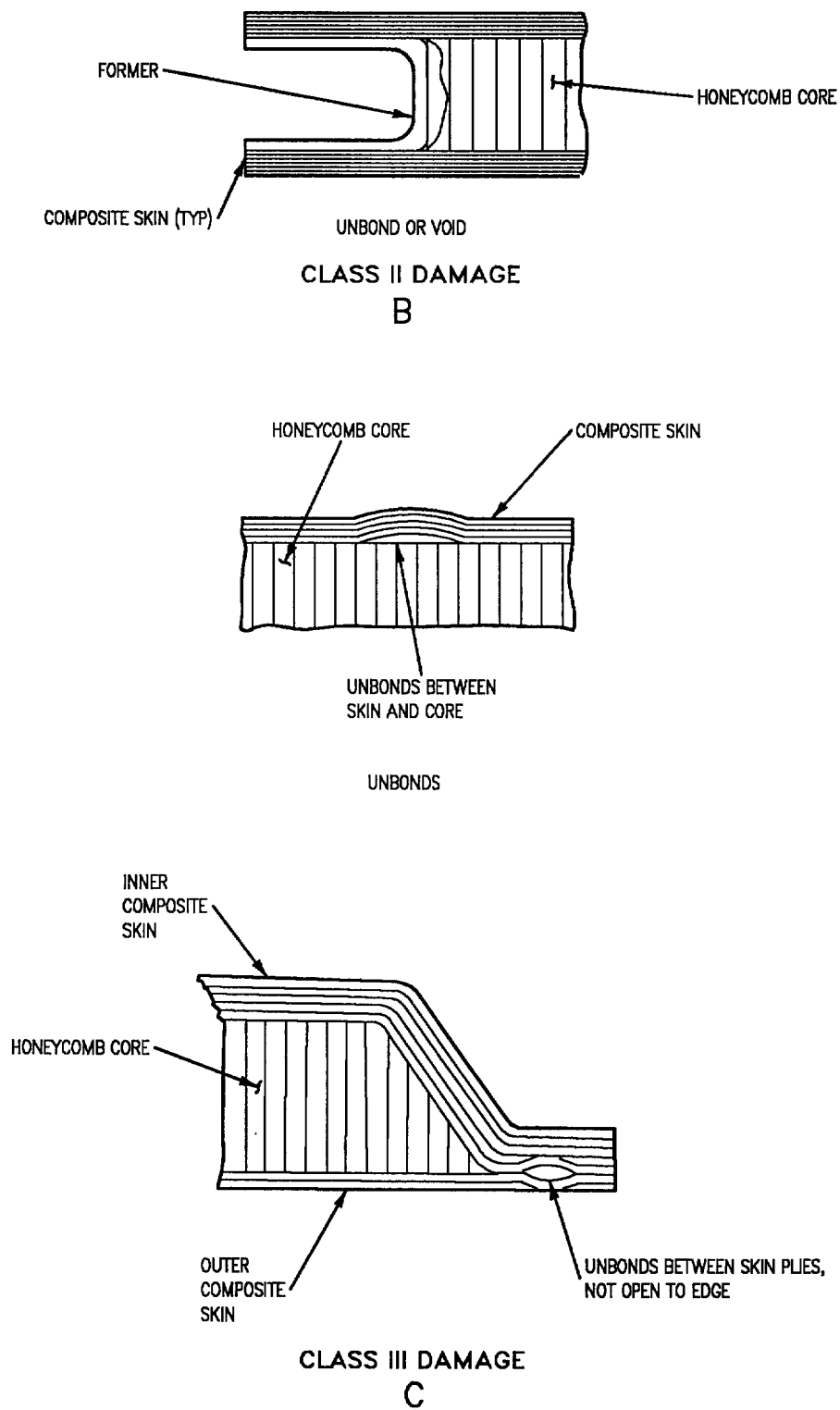


Figure 4. Repairable Damage (Sheet 2)

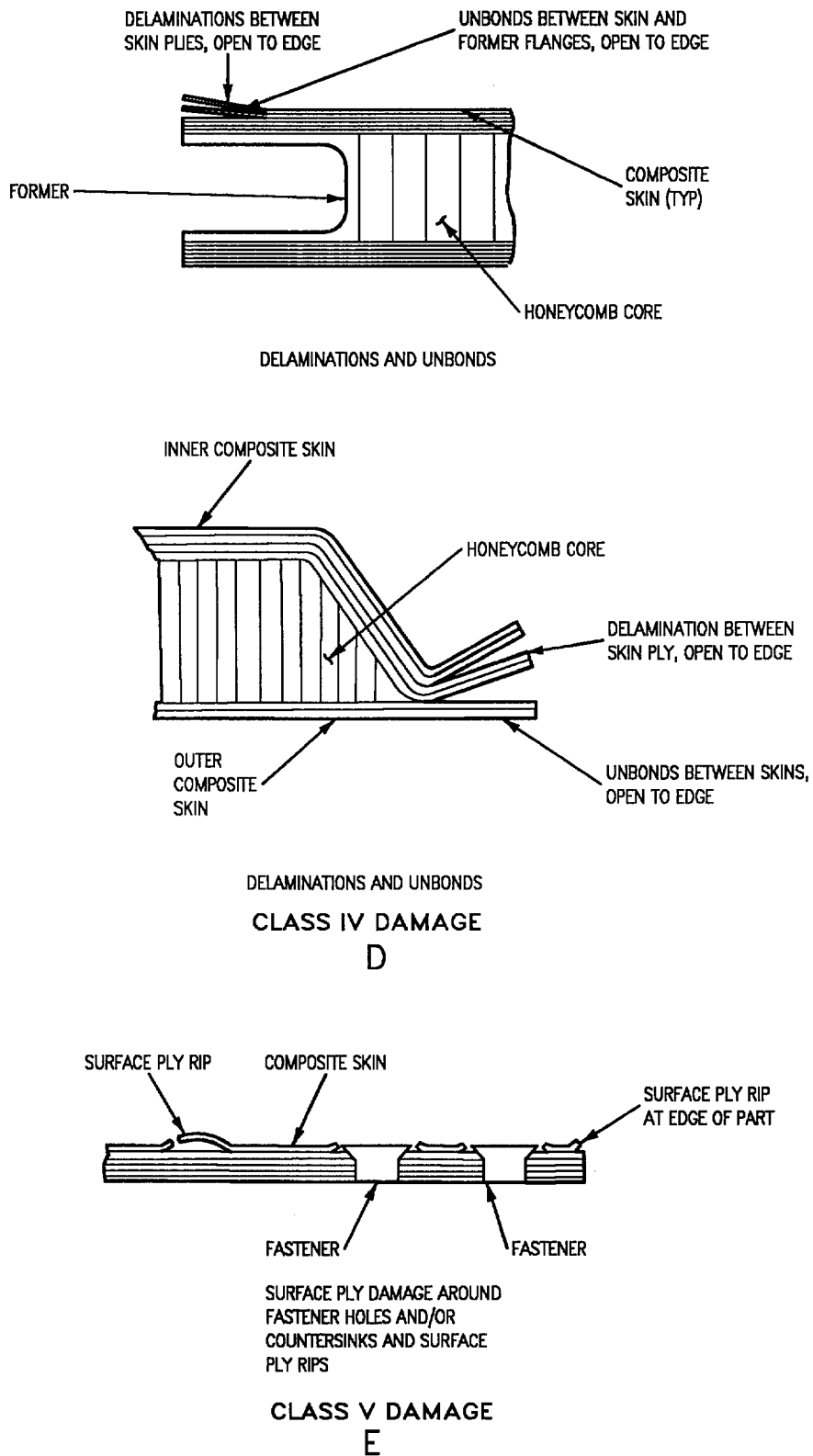
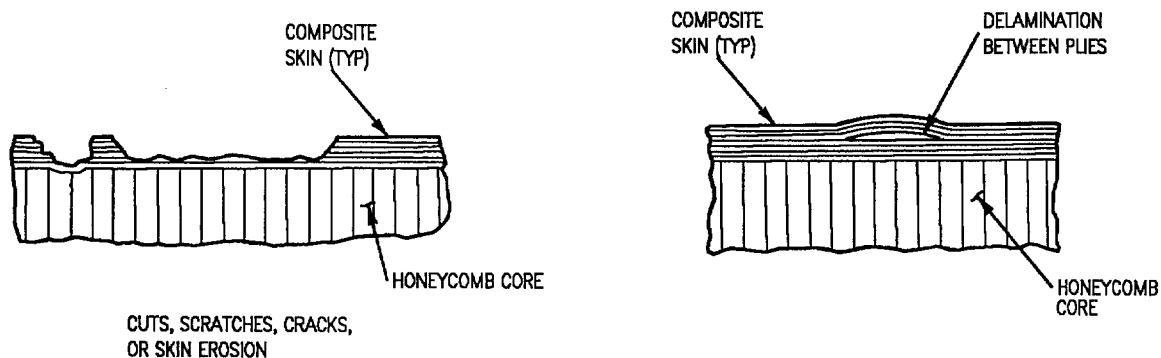
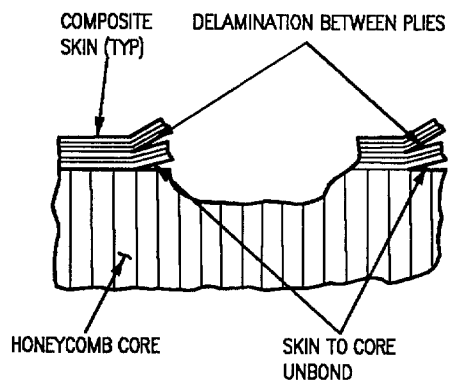
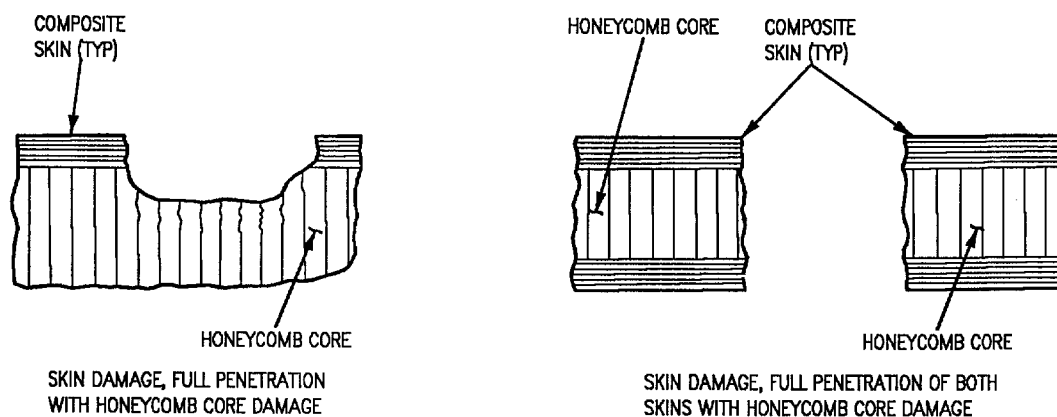


Figure 4. Repairable Damage (Sheet 3)

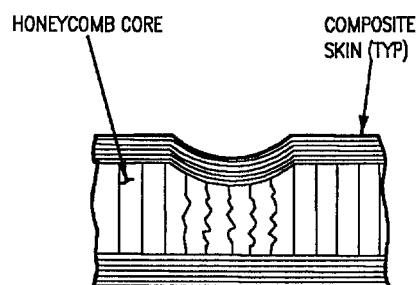


CLASS VI DAMAGE

F



SKIN DAMAGE, FULL PENETRATION OF ONE OR BOTH SKINS, DELAMINATION OF PLIES OPEN TO DAMAGE, PLIES TO CORE UNBOND OPEN TO DAMAGE

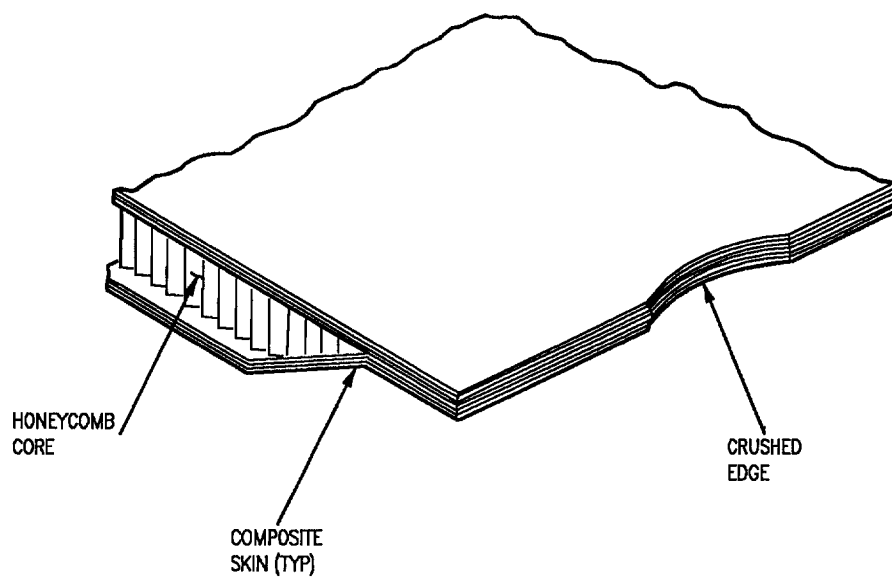
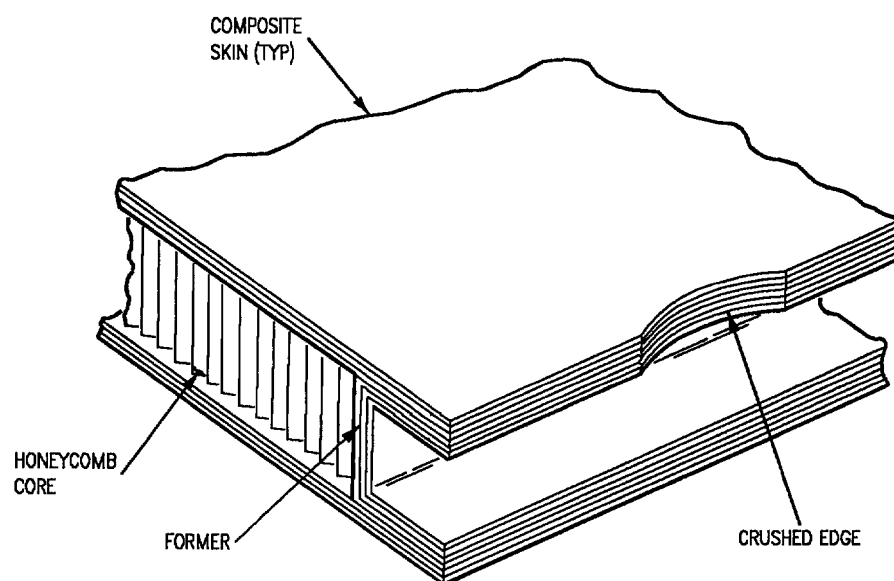


DENTS WITH CRUSHED CORE

CLASS VII DAMAGE

G

Figure 4. Repairable Damage (Sheet 4)



CLASS IX DAMAGE

H

Figure 4. Repairable Damage (Sheet 5)

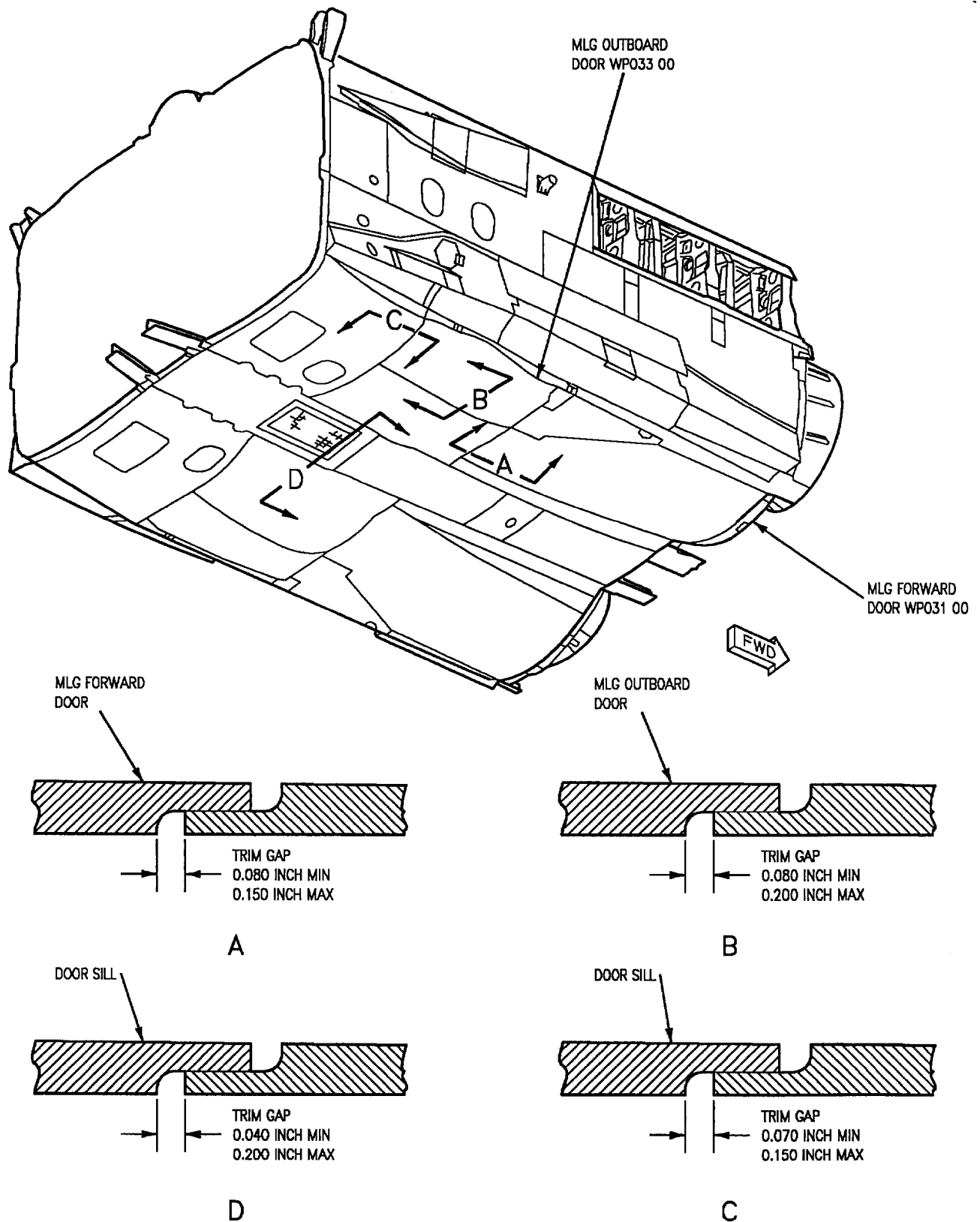


Figure 5. Replacement Trim Gap

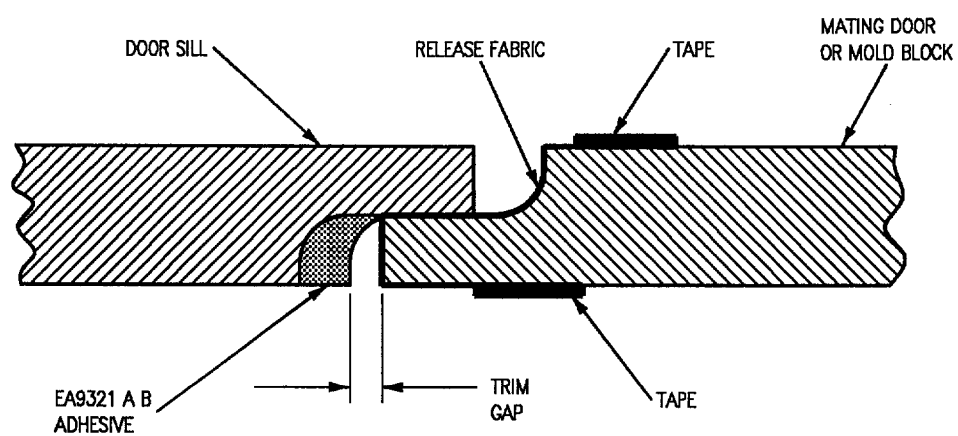
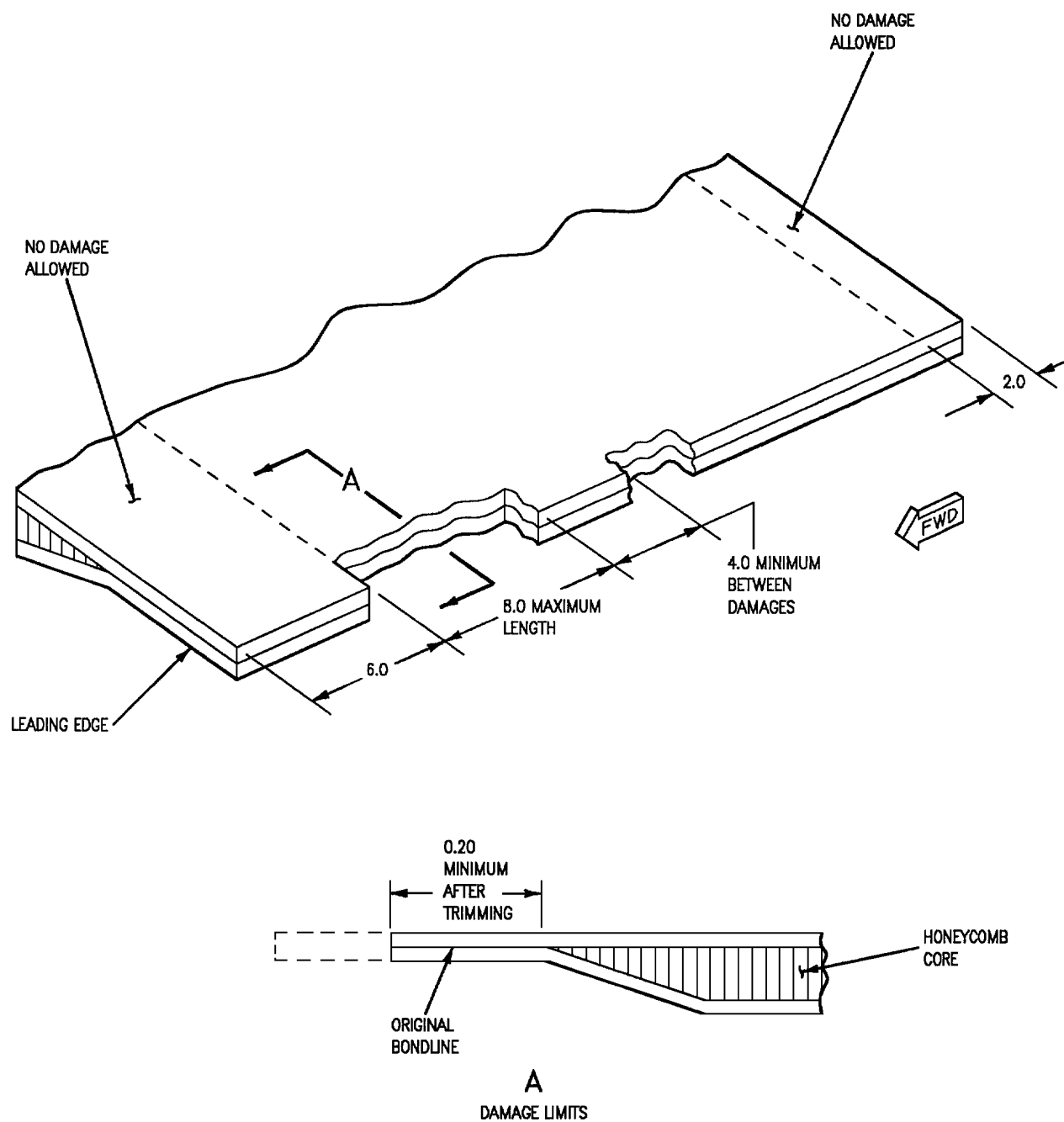


Figure 6. Door Edge Gap Repair



LEGEND

- 1 TRIM DIMENSION FOR RECESS EDGE, TYPICAL.
- 2 REMAINING THICKNESS AFTER TRIM DIMENSION, TYPICAL.
- 3 STEP DEPTH, ONE-HALF OF REMAINING THICKNESS, TYPICAL.

Figure 7. Outboard Edge Repair (Sheet 1)

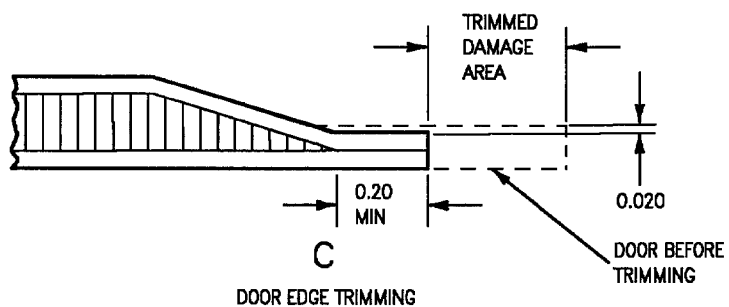
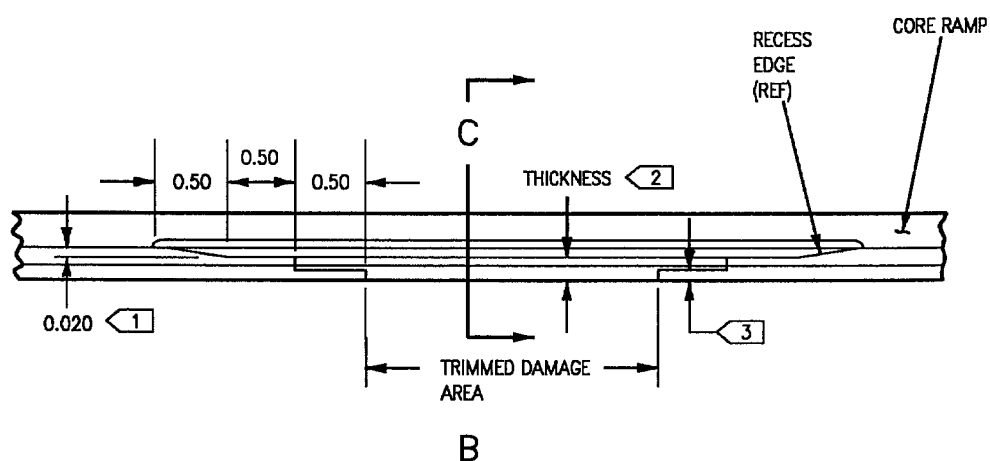
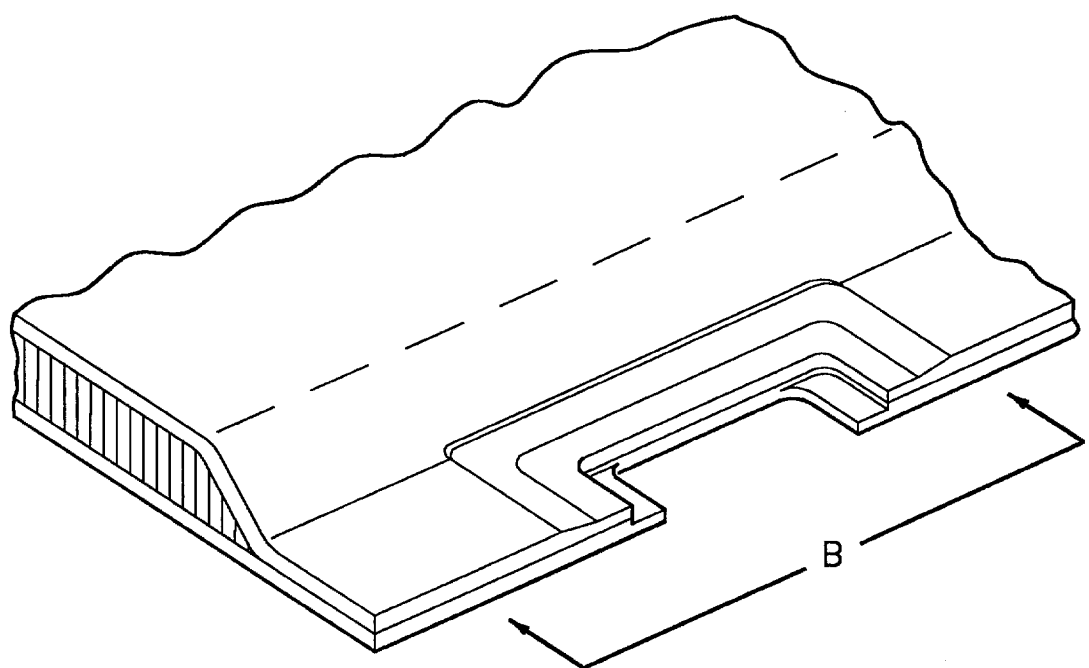


Figure 7. Outboard Edge Repair (Sheet 2)

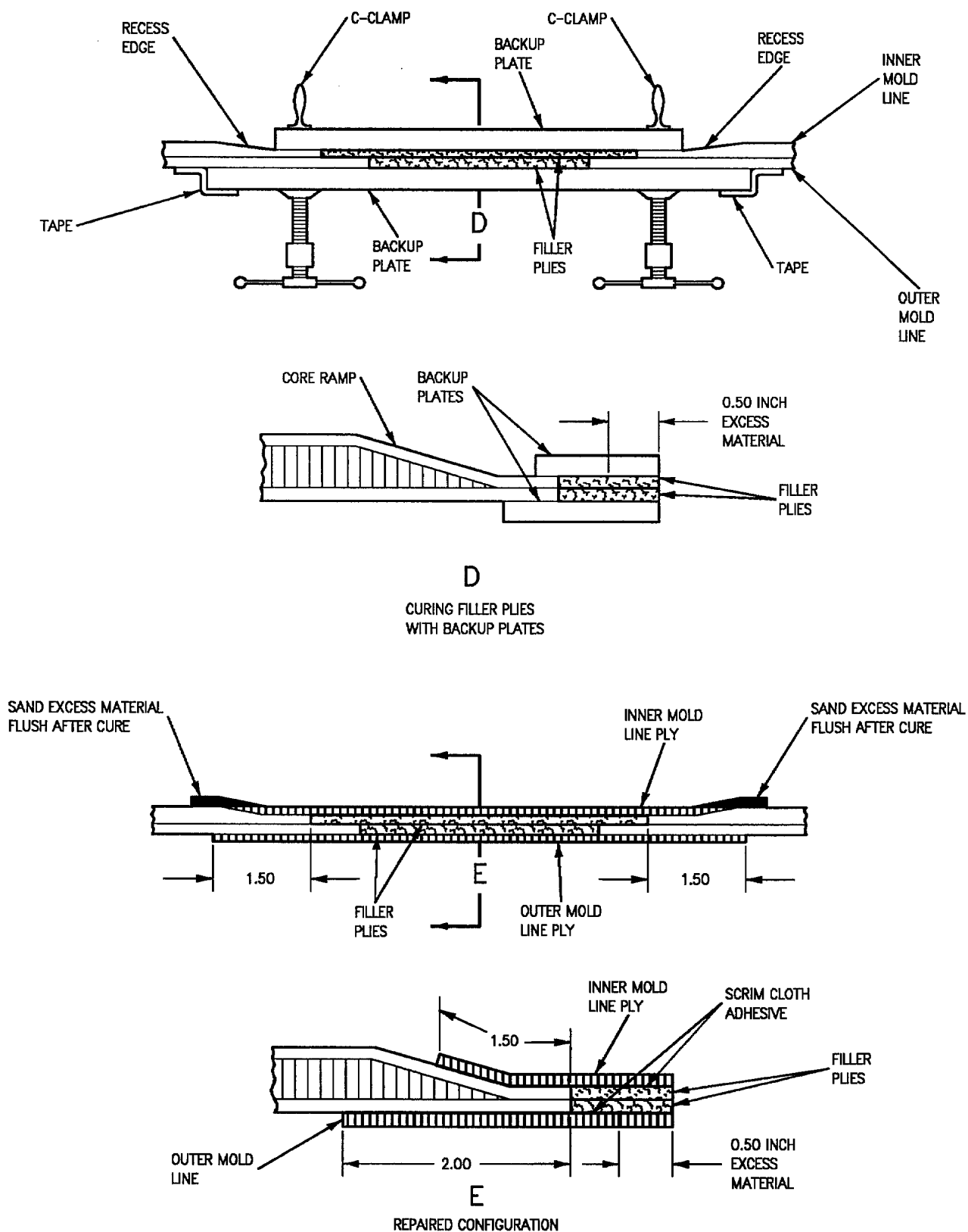


Figure 7. Outboard Edge Repair (Sheet 3)

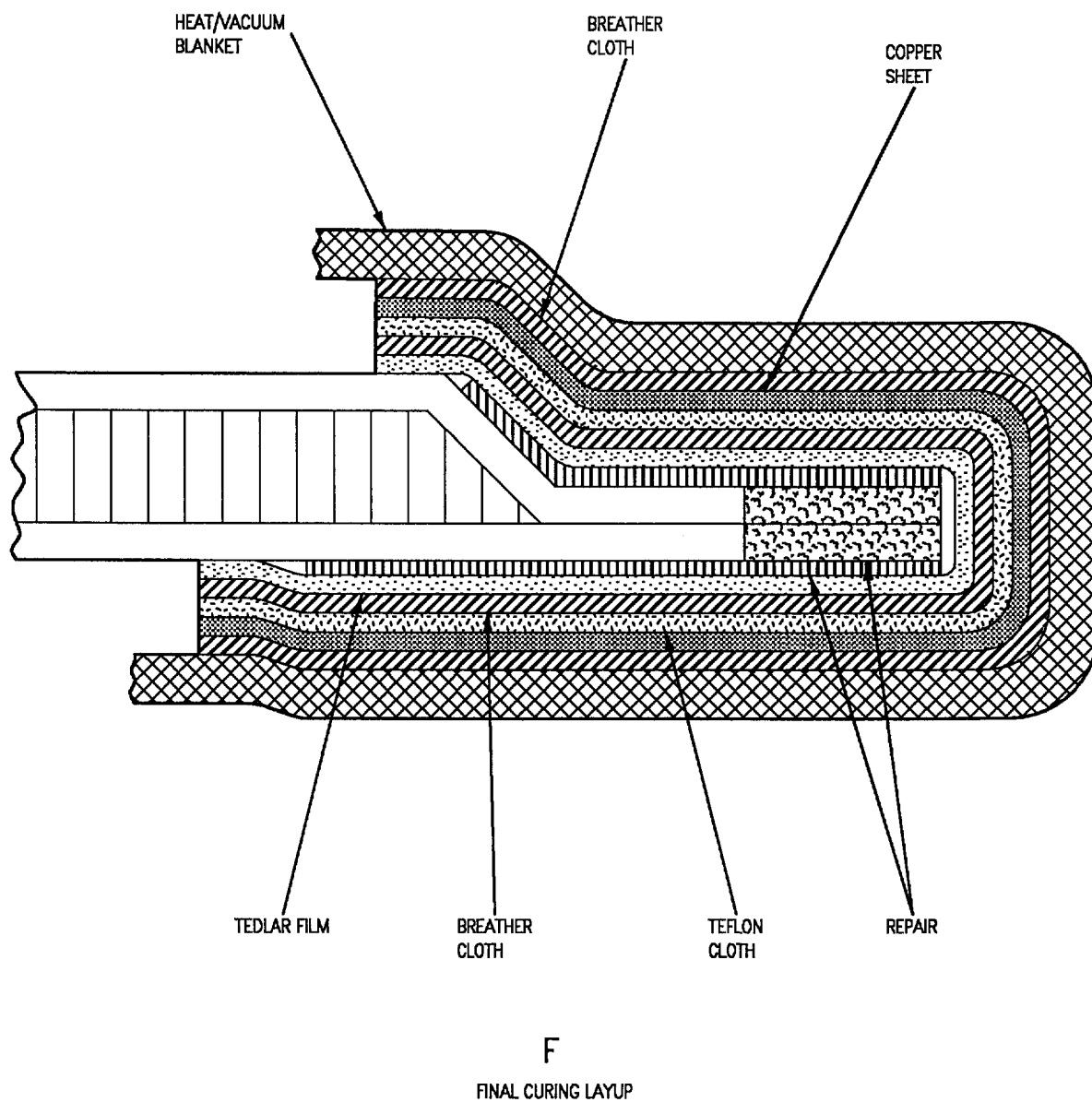
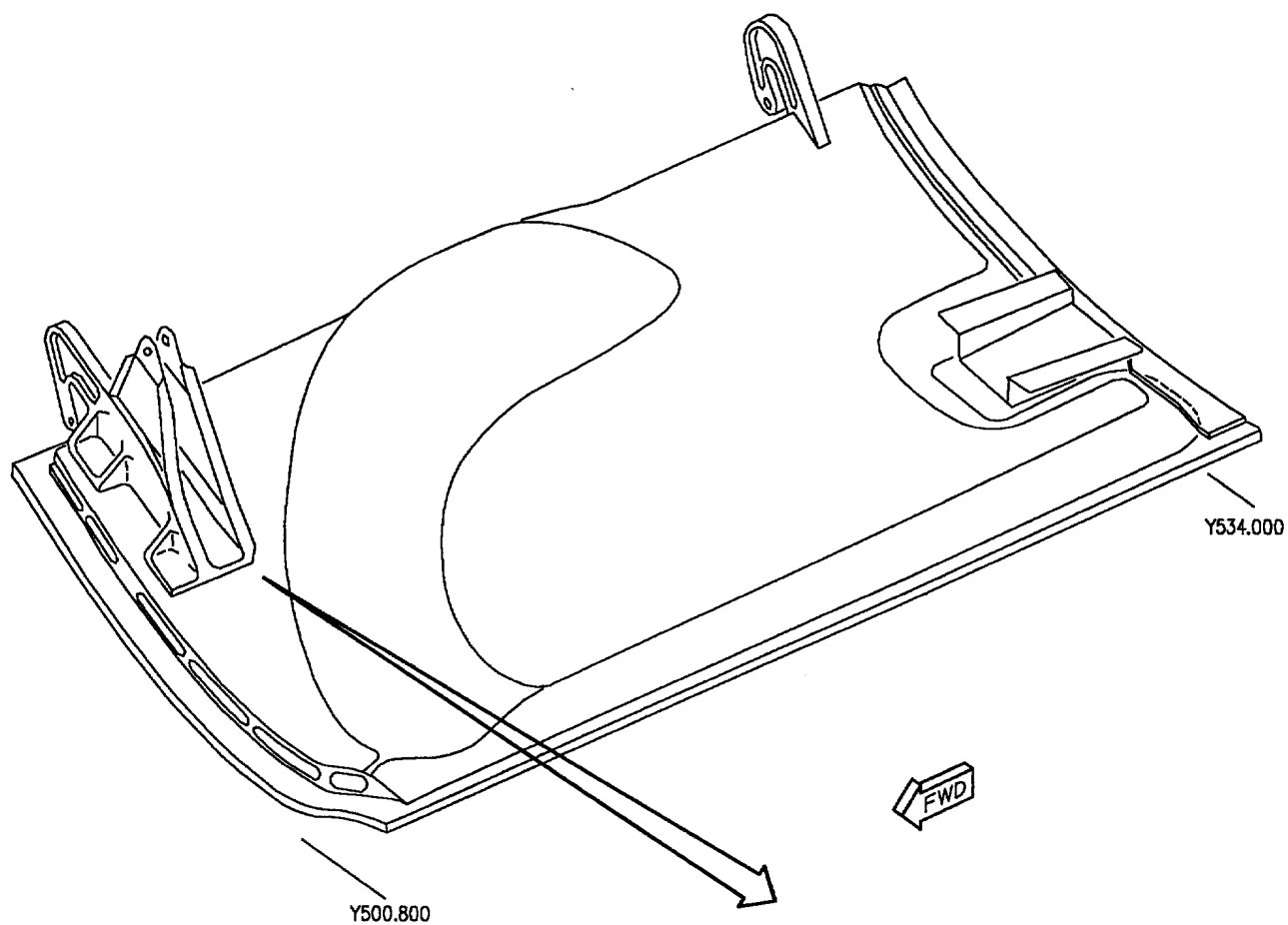


Figure 7. Outboard Edge Repair (Sheet 4)



ITEM	NOMENCLATURE	EXISTING PART NO.	REPAIR PART NO.
1	SCREW	NAS664V23	HT4025L4-25
2	NUT	NAS1291C4M	NAS1291C4M
3	SCREW	NAS664V21	HT4025L4-23
4	SHIMS	74A426030 -2003/-2011	74A426030 -2003/-2011

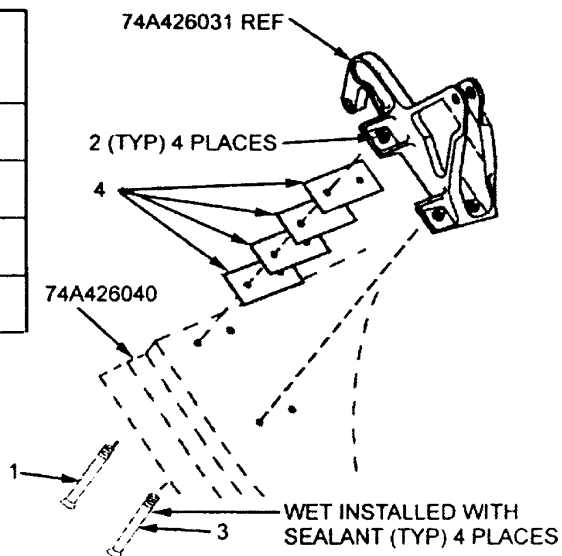
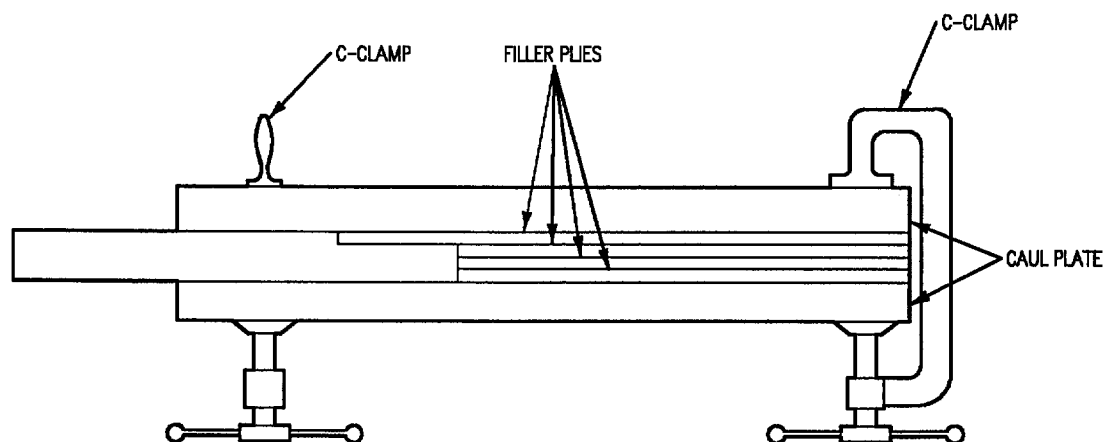
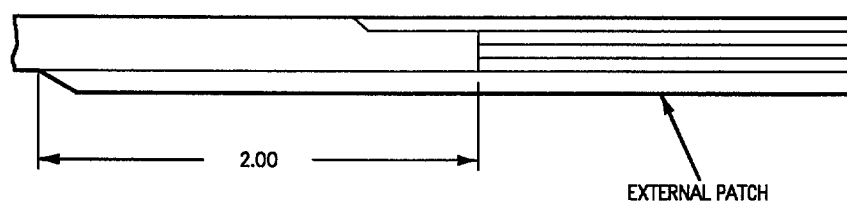


Figure 8. Forward Hinge Half, Repair



THRU ASSEMBLED REPAIR



FINAL-REPAIR

A

Figure 9. Forward Outboard Corner Repair (Sheet 2)

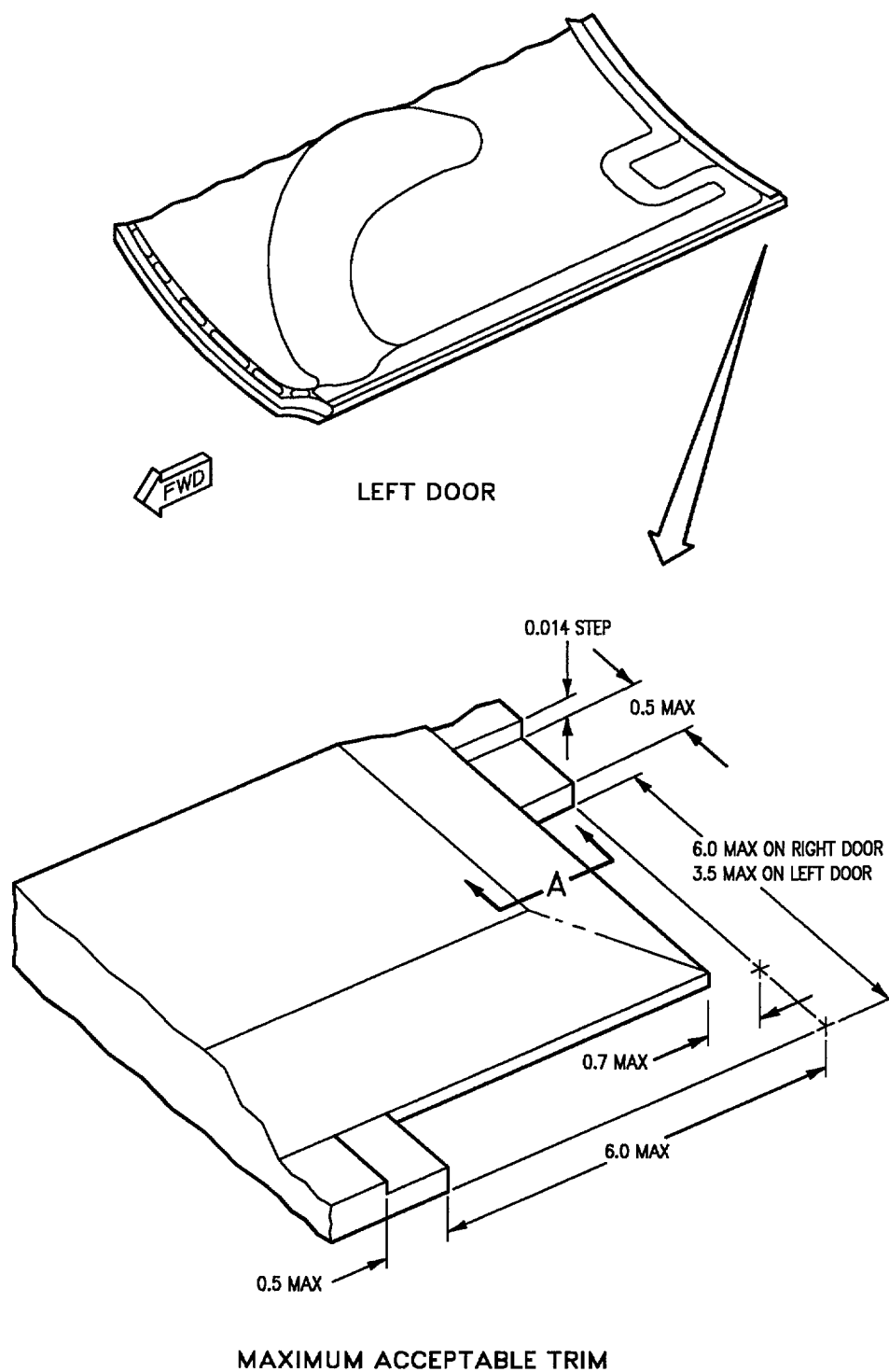
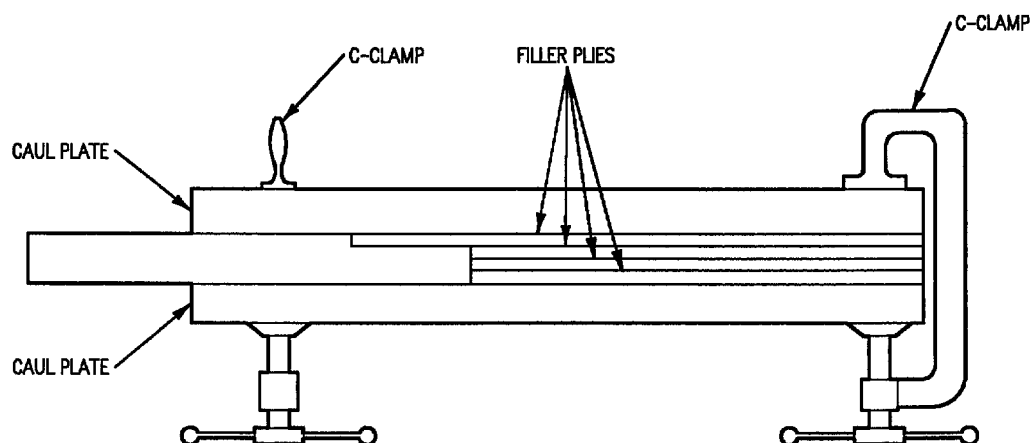
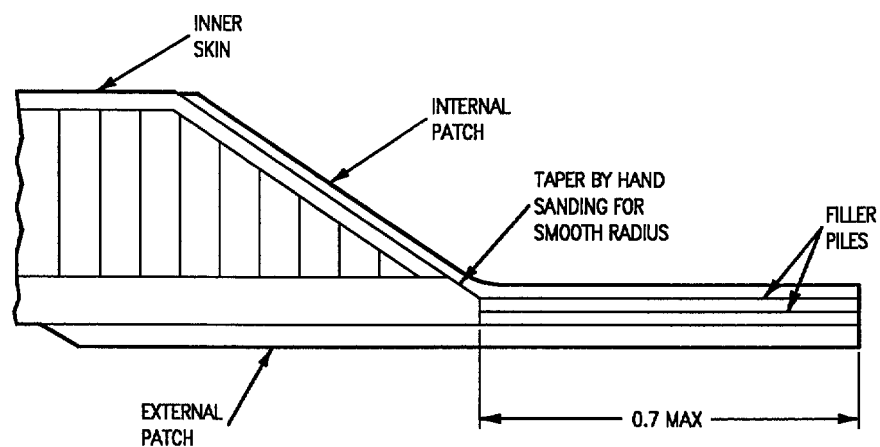


Figure 10. Aft Outboard Corner Repair (Sheet 1)



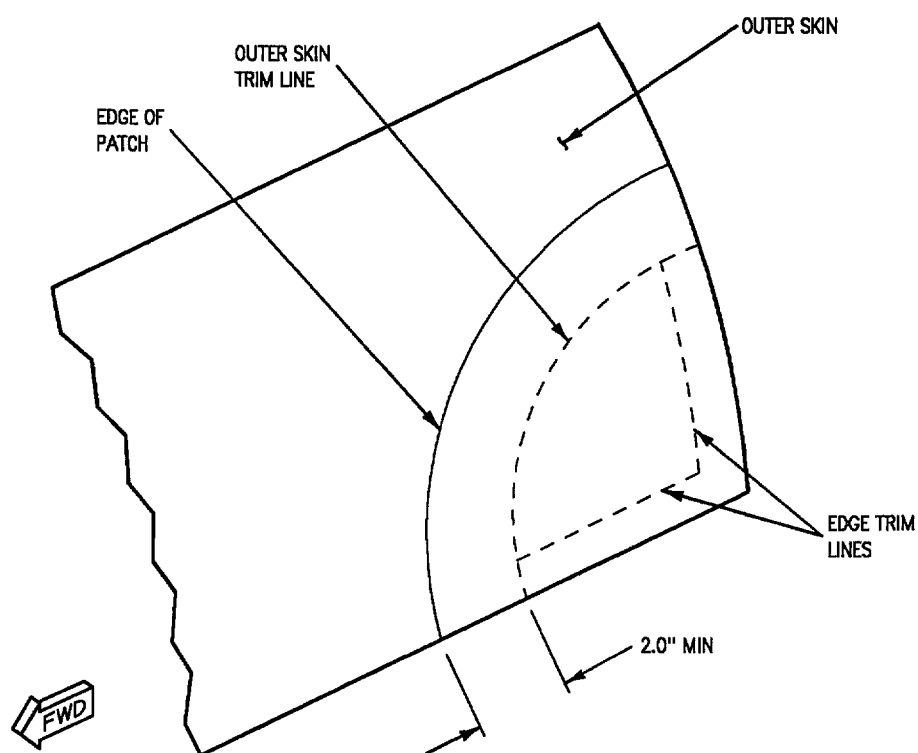
THRU ASSEMBLED REPAIR



A

INSTALLATION OF INNER AND
OUTER MOLD LINE PATCHES

Figure 10. Aft Outboard Corner Repair (Sheet 2)



OUTER SKIN PATCH OVERLAP

Figure 10. Aft Outboard Corner Repair (Sheet 3)

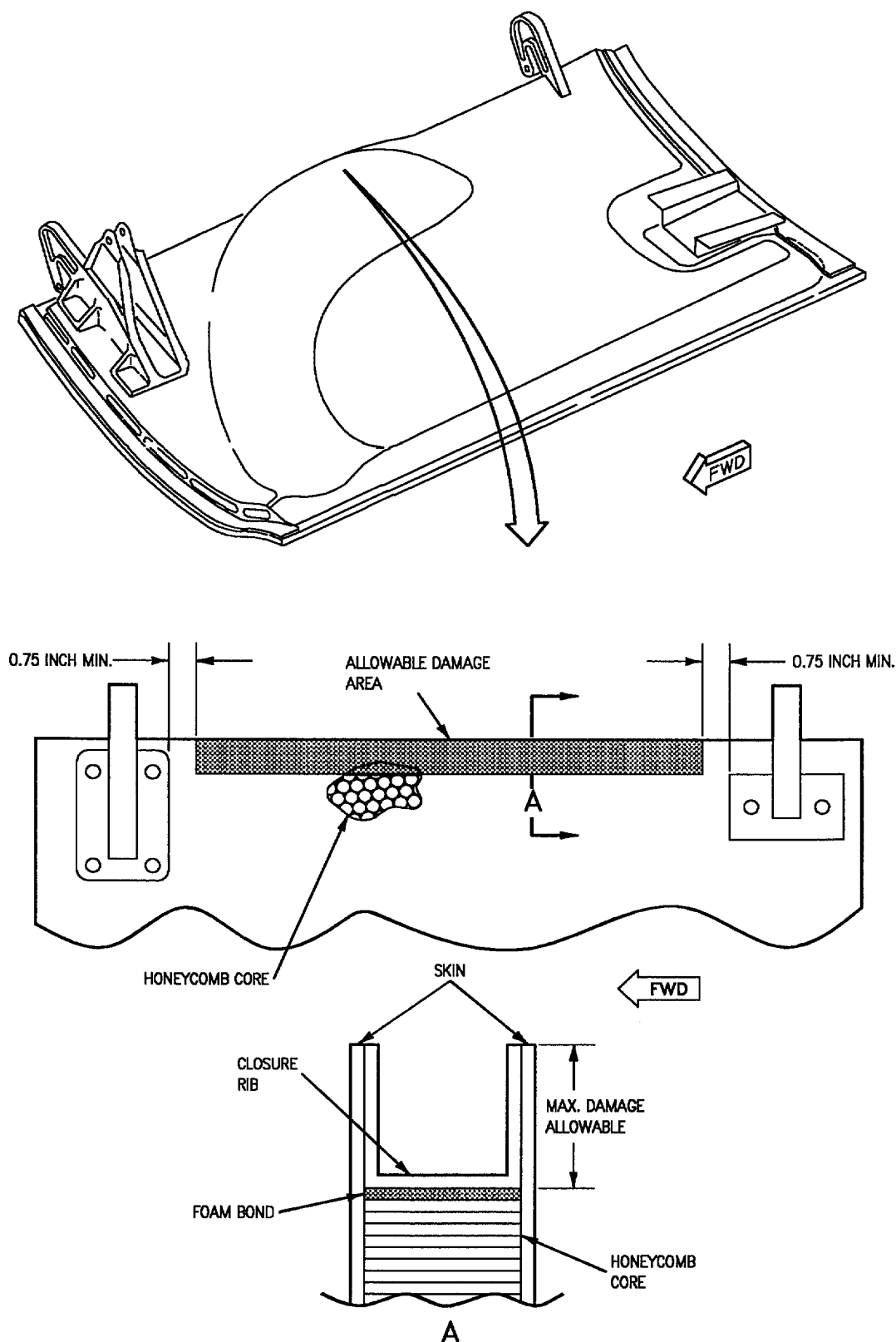


Figure 11. Inboard Edge Repair

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

STRUCTURE REPAIR

MAIN LANDING GEAR OUTBOARD DOOR

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Chemical Treatment	WP008 00
Landing Gear, Arresting Hook, and Launch Bar, Finish System and Markings	WP042 00
Landing Gear and Related Systems	A1-F18AC-130-300
MLG Outboard Door	WP048 00
Nondestructive Inspection	A1-F18AC-SRM-300
Radiographic Method	WP005 00
Ultrasonic Through Transmission Contact Testing, Standardization, and Inspection Procedures	
For Composite Laminate Skins Bonded to Honeycomb Core	WP008 01
Pulse Echo, Longitudinal Wave Contact, with Delay Line, for Composite Laminate Material	
Bonded to Honeycomb Core	WP008 04
Main Landing Gear Doors, Water in Honeycomb	WP076 00
Main Landing Gear Outboard Door Skin to Core Unbonds and Edge Delaminations	WP076 01
Structure Repair, General Information	A1-F18AC-SRM-200
Flat Pattern Development	WP004 00
Working Titanium Alloy	WP004 02
Locating Blind Holes and Trim Lines	WP004 03
Fasteners	WP004 06
Drilling and Machining Composites	WP004 08
Adhesive, Cement, Sealant; Preparation and Application	WP011 00
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Material preparation	WP003 00
Curing of Repairs	WP004 00
Water Removal	WP005 00
Aluminum Graphite Epoxy, or Titanium Patch Installation	WP007 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class I Damage Repair	WP012 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class II Damage Repair	WP013 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class III Damage Repair	WP014 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IV Damage Repair	WP015 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class V Damage Repair	WP016 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VI Damage Repair	WP017 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class VII Damage Repair	WP018 00
Graphite Epoxy Skin and Aluminum Honeycomb Core, Class IX Damage Repair	WP019 00

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Record of Applicable Technical Directives

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Locating and determining size of damage by visual method is organizational maintenance. Locating and determining size of damage by NDI is intermediate maintenance. Repair zones are provided to allow repairs in some areas. Damage not listed or exceeding following limits requires depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** See figure 3. Negligible damage may be allowed to exist as is. Type and limits for inner and outer skins are as follows:

a. Delaminations between skin plies (section A). Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations do not extend to edge of skins.

(2) Diameter is 1/2 inch or less.

(3) Distance between delaminations is at least four diameters of the largest delamination. Measure distance between delaminations edge to edge.

(4) No more than three delaminations are in a 12 inch diameter circle.

(5) No delaminations within 4 inches of hinge or actuator fitting.

b. Unbonds between skin and honeycomb core (section B). Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Unbonds do not extend to edge of skin.

(2) Diameter is 3/4-inch or less.

(3) Distance between unbonds is at least 4 inches. Measure distance between unbonds edge to edge.

(4) No more than three unbonds are in 12 inch diameter circle.

(5) No unbonds within 4 inches of hinge or actuator fitting.

c. Unbonds between skin and former (section C).

(1) No unbonds are in area of former where actuator fitting is attached.

(2) Diameter is 1/4-inch or less.

(3) No longer than 1 inch.

(4) Unbond area no greater than 0.20 square inch.

(5) Unbonds do not extend to edge of skin.

(6) Unbonds are separated by at least eight diameters of largest unbond, measured edge to edge.

d. Former to honeycomb core unbonds or voids (section D).

(1) No unbonds or voids within 4 inches of hinge or actuator fitting.

(2) Total cumulative length of unbonds or voids does not exceed 2 inches in 10 inches.

(3) Diameter is 1/2-inch or less.

e. Dents.

(1) Diameter less than 3 inches.

(2) Depth is no greater than 0.015 inches.

4. **REPAIRABLE DAMAGE.** See figures 2 and 4. Repairable damage is damage that can be permanently repaired with no adverse effect on structural integrity, flight characteristics, or safety of aircraft.

5. Skin Surface Damage and Dents Without Honeycomb Core Damage, Class I Damage. See figure 4, sheet 1, section A. This class of damage does not require immediate repair but shall be repaired as soon as practical. Damage shall be monitored to make sure limits are not exceeded. Damage may be in repair zone A1, A2, B2, or C (figure 2). Class I damage is skin damage which does not exceed limits listed below:

a. Cuts, scratches, pits, erosion, or abrasions.

(1) Depth is no greater than 0.005 inch.

(2) No longer than 5 inches.

b. Dents.

(1) Depth is no greater than 0.05 inch.

(2) Skin delaminations and/or skin to core unbonds do not exceed negligible limits.

(3) Graphite fiber damage is no greater than 0.005 inch deep.

(4) Diameter is no greater than 3 inches.

(5) Distance between dents is at least two diameters of largest dent. Measure distance between dents edge to edge.

(6) No crushed core.

6. Structure to Honeycomb Core Voids or Unbonds, Class II Damage. See figure 4, sheet 2, section B. Class II damage is former to honeycomb core unbonds or voids which do not exceed limits listed below:

a. Unbonds or voids that exceed negligible damage limits.

b. Unbonds or voids are unlimited in size and number.

c. No unbonds or voids within 3 inches of hinge or actuator fitting.

7. Skin Delaminations, Unbonds, or Skin to Core Unbonds Not Open to Edge, Class III

Damage. See figure 4, sheet 2, section C. This class of damage is individual or multiple unbonds that are not open to edge of cover and are in repair zone A1, A2, B2, or C (figure 2). Class III damage shall not exceed limits listed below:

a. Skin to honeycomb core unbonds. Determine size and location of unbonds (A1-F18AC-SRM-300, WP008 01).

(1) Multiple or individual unbonds.

(2) Diameter is 2 inches or less.

(3) Distance between unbonds is at least 4 times diameter of largest unbond.

(4) No unbonds within 4 inches of hinge or actuator fitting.

b. Graphite epoxy skin to glass laminate plies. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Not open to edge.

(2) Diameter 4 inches or less.

(3) Spacing less than 4 diameters.

8. Skin Delaminations or Unbonds Open to Edge, Class IV Damage. See figure 4, sheet 3, section D. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04). Class IV damage is damage which does not exceed limits listed below:

a. Skin to former unbonds.

(1) Unbonds that are open to edge of skin.

(2) Unbonds that do not extend into honeycomb core.

(3) Unbond area is less than 2.0 square inches.

(4) No longer than 4 inches.

(5) Unbonds not related to any other damage.

(6) No closer than 4.0 inches to hinge or actuator fitting.

(7) Minimum spacing is 4 times length of largest unbond.

b. Delaminations between skin plies.

(1) Delaminations that are open to edge of skin.

(2) Unbond area is less than 2.0 square inches.

(3) No longer than 4 inches.

(4) Distance between delaminations is at least 4 times diameter of largest delamination.

(5) No closer than 4 inches to hinge or actuator fitting.

c. Inner and outer skin unbonds.

(1) Unbonds that are open to edge of skin.

(2) Width is 3/4-inch or less.

(3) No longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

d. Graphite epoxy to glass laminate plies.

(1) Unbonds that are open to edge of skin.

(2) Width is less than 1 inch.

(3) Length no longer than 4 inches.

(4) Distance between unbonds is at least 4 times diameter of largest unbond.

9. Fiber Damage Around Fastener Holes and Surface Rips, Class V Damage. See figure 4, sheet 3, section E. Class V damage is loose or broken fibers, missing fibers, or skin abrasion around fastener holes or countersinks which does not exceed limits listed below:

a. Depth is no greater than 0.014 inch.

b. Width is no greater than 1/4-inch.

c. No longer than 1/2-inch.

10. Skin Damage Without Penetration, Class VI Damage. See figure 4, sheet 4, section F. Class VI damage is delaminations over honeycomb core that exceed negligible damage limits. Class VI damage is also cracks, cuts, scratches, or erosion exceeding Class I damage, located in zone A1, A2, or B2, but does not exceed limits listed below:

a. Depth that is greater than 0.005 inch but less than full skin penetration.

b. Diameter is no greater than maximum damage size (figure 2).

c. Damage is located where required patch does not overlap fasteners.

d. Distance between damages is at least 4 times diameter of largest damage.

e. Edge distance of cleaned-up damaged hole shall be no closer than 1 diameter from edge of honeycomb core ramp in inner skin, or extend beyond areas where skins are not next to core.

f. Skin delaminations. Determine size and location of delaminations (A1-F18AC-SRM-300, WP008 04).

(1) Delaminations that are not opened to edge of skin.

(2) Diameter is 3 inches or less.

(3) Distance between delaminations is at least 4 times diameter of largest delamination.

(4) No delaminations within 4 inches of hinge or actuator fitting.

11. Skin Damage With Penetration and Dents With Honeycomb Core Damage, Class VII Damage. See figure 4, sheet 4, section G. Class VII damage is skin and honeycomb core damage, located in zone A1 or A2 but does not exceed limits listed below:

a. Full penetration of one or both skins.

b. Honeycomb core damage is allowable.

c. Diameter is no greater than maximum damage size (figure 2).

d. Damage is located where required patch does not overlap fasteners.

e. Distance between damages is at least four times diameter of largest damage.

f. Edge distance of cleaned-up damaged hole in inner skin shall be no closer than one diameter from edge of honeycomb core ramp, or extend beyond areas where skin is not next to core.

g. The requirements are same for outer skin except core ramp edge distance restriction is not applicable.

h. Dents.

(1) Diameter greater than 3 inches.

(2) Depth greater than 0.05 inches.

(3) Crushed core allowed.

12. Water in Honeycomb Core, Class VIII Damage. Class VIII damage is water trapped in honeycomb core. For locating water in core (A1-F18AC-SRM-300, WP076 00).

13. Edge Damage, Class IX Damage. See figure 4, section H. Class IX damage is damage which does not exceed limits listed below:

a. Depth less than 0.20 inches.

b. Length less than 4 inches.

c. Edge to edge spacing greater than four times the largest crush.

d. Class IV damage not exceeded.

14. REPAIRS.

15. Classes I, II, III, IV, V, VI, VIII and IX are organizational maintenance. Class VII less than 1.5 inches in diameter is organizational maintenance; over 1.5 inches in diameter is intermediate maintenance. Classes I, II, III, IV, V, VI, VII, VIII and IX may be repaired per procedures referenced below:

a. Repair Class I damage (A1-F18AC-SRM-250, WP012 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

b. Repair Class II damage (A1-F18AC-SRM-250, WP013 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

c. Select patch for Class III damage per paragraph 16. Repair Class III damage (A1-F18AC-SRM-250, WP014 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

d. Repair Class IV damage (A1-F18AC-SRM-250, WP015 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

e. Repair Class V damage (A1-F18AC-SRM-250, WP016 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

f. Select patch for Class VI damage per paragraph 16. Repair Class VI damage (A1-F18AC-SRM-250, WP017 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

g. Select patch for Class VII damage per paragraph 16. Repair Class VII damage (A1-F18AC-SRM-250, WP018 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

h. Repair Class VIII damage (A1-F18AC-SRM-250, WP005 00).

i. Repair Class IX damage (A1-F18AC-SRM-250, WP019 00). Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

16. **PATCH SELECTION.** Type of patch to be used depends on class of damage, repair zone, type of adhesive, and damage size. Select applicable patch number for class III damage using table 1, Class VI and VII damage using table 2, table 3, or table 4, and limits listed below:

a. When selecting patch for Class VI or Class VII damage, damage occurring in more than one zone must meet requirements of zone with smallest allowable damage size (figure 2). Any damage occurring partially in zone C requires depot engineering disposition.

NOTE

Titanium patches conform more easily to skin curvature.

b. The required patch must not lap over any abrupt surface break or sharp curvature that may prevent patch from easily conforming to skin surface.

c. Patch may not interfere with structure or cover any countersink fasteners.

d. When selecting patch for Class III damage, patch must overlap injection holes by at least 1/2 inch.

e. Patches exceeding steps a, b, c, or d require depot engineering disposition.

17. **ACTUATOR FITTING, 74A426054, REPAIR, INTERMEDIATE LEVEL MAINTENANCE.** This repair is used when actuator fitting is loose. See figure 5.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Torque Wrench, 0 to 60 Inch-Pounds	-
Shoulder Drill Bushing	15/64-Inch Diameter

Materials Required

Nomenclature	Specification or Part Number
Adhesive	EA9321 A/B

Bolt	NAS664V21HT
Bolt	NAS674V6
Chemical Conversion Coating	MIL-C-81706
	CLASS 1A
	FORM 3
Nut (2)	NAS1291C4M
Sealing Compound	MIL-S-8802 Type 1
	Class B-4
Twist Drill 0.234 Inch Dia.	-
Washer (2)	AN960C416

a. Remove MLG outboard door (A1-F18AC-130-300, WP048 00).

b. Drill out forward fasteners.

NOTE

Take care not to lose shims under fitting.

c. Drill and ream forward holes to 0.2495 +0.0025 -0.0000 inch diameter.

d. Clean area of foreign objects, and deburr holes.



Conversion Coating

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e. Treat holes with chemical conversion coating MIL-C-81706, surface treatment (A1-F18AC-SRM-500, WP008 00).



Sealing Compound

6

f. Wet install, using temperature resistant sealing compound, NAS674V6 bolts with NAS1291C4M nuts and AN960C416 washers. See detail B. Sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

g. Torque bolts 30 to 40 inch-pounds.

h. Drill out aft fasteners.



When pushing trapped sleeve aside into core make as little core damage as possible. Excess core damage may cause need for larger repair.

- i. Push trapped Jo-Bolt sleeves aside into core.

NOTE

Do not drill through outer flange of titanium former.

- j. Using 0.234 inch diameter drill, open aft holes in actuator fitting, graphite epoxy skin, inner flange of titanium former, and drill into core (A1-F18AC-SRM-200, WP004 02).

- k. Clean area of foreign object and deburr.



Adhesive



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- l. Inject EA9321 A/B adhesive into aft holes. Avoid trapping air in EA9321 A/B adhesive. Fill holes to titanium former flange, see detail B. Adhesive preparation and application A1-F18AC-SRM-200, WP011 00).

- m. Cure EA9321 A/B adhesive (A1-F18AC-SRM-250, WP004 00).

- n. Using 0.234 inch diameter twist drill, drill holes through adhesive, stopping at flange of titanium former.

- o. Insert shoulder drill bushings into holes. Drill bushings should be long enough to contact outer flange of titanium former.

- p. Drill pilot holes through titanium former flange and graphite epoxy skin (A1-F18AC-SRM-200, WP004 02 and WP004 08).

- q. Remove shoulder drill bushings.

- r. Drill 0.250 +0.006 -0.000 inch diameter holes through entire assembly (A1-F18AC-SRM-200, WP004 02 and WP004 08).

- s. Countersink mold line graphite epoxy skin for NAS664 bolt (A1-F18AC-SRM-200, WP004 08).

- t. Clean area of foreign objects.

- u. Treat holes with chemical conversion coating MIL-C-81706, surface treatment (A1-F18AC-SRM-500, WP008 00).

- v. Wet install, using temperature resistant sealing compound, NAS664V21HT bolts, NAS1291C4M nuts, and AN960C416 washers.

- w. Torque bolts 30 to 40 inch-pounds.

- x. Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

- y. Install MLG door (A1-F18AC-130-300, WP048 00).

18. **LEADING EDGE REPAIR.** See figure 7. This repair is used when damage exists in leading edge around missile cut out area in skin.

19. Damage Limitations.

- a. Damaged skin cannot extend past titanium former.

- b. A maximum of 0.25 inch of delaminations shall be allowed to extend over titanium former.

- c. Damage shall not extend inboard and outboard along leading edge more than 1.75 inches.

- d. No more than 1 inch of fiberglass rub strip may be removed to allow for repair.

- e. Make sure minimum of 0.75 inch over lap of internal patch inboard and outboard of damage on undamaged skin can be maintained.

20. Repair Procedure.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Toolset-Structural Repair, Composite Materials	74D110172

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047 Grit 180 and 240-9 X 11
Adhesive	EA9321 A/B
Adhesive	EA956
Adhesive	FM 300
Adhesive, Release Tape, Flash Lease 2	A4000 1/2 PT
Adhesive Tape, Vacuum Bag Tape	9151-0-500
Cheesecloth	CCC-C-440 Type 1 Class 1
Cloth, Dry Woven Graphite	MMS-544
Cloth Netting, Nylon Cloth, Scrim Cloth	Pattern 30 (5602)
Cloth, Teflon Nonporous Release Fabric	TEMP-R-GLAS 6TB
Cloth, Satin Glass Fabric Breather Cloth	MIL-C-9084 Type 8, Class 2
Mens Gloves, Cotton Work Gloves	MIL-G-3866, Type 1, Small or Medium
Roller or Spatula	-
Sheet, Plastic	200SG40TR

WARNING

Sanding and cutting of graphite epoxy skin produces fine dust that may cause skin irritation. Breathing excessive amount of dust may be injurious.



Use caution in disposal of fibrous graphite and graphite epoxy scrap. Graphite fibers have high electrical conductivity. Free floating fibers getting inside unsealed or unprotected electrical equipment can cause failure or malfunction.

NOTE

Nonfibrous dust caused by sanding or cutting graphite epoxy skin is not considered a danger to electrical equipment and may be disposed of same as any waste.

- a. Remove MLG outboard door (A1-F18AC-130-300, WP048 00).



When sanding make sure not to damage remaining skin.

- b. Rout or sand damaged area to form smooth edge.



Wear clean cotton work gloves when working with graphite epoxy materials to prevent contamination.

- c. Compare part to figure and determine size of wet layup patch to be installed.

- d. Remove fasteners that will be covered by patch (A1-F18AC-SRM-200, WP004 00).



Adhesive

4

- e. Prepare EA956 adhesive (A1-F18AC-SRM-250, WP003 00).

- f. Fill, pot, countersinks with EA956 adhesive.

- g. Cure adhesive, in countersinks, at 190° F 10° F for 1 hour using heat lamp or cure at room temperature for 2 hours.

- h. Dry repair surface (A1-F18AC-SRM-250, WP007 00).

i. Cut enough dry woven graphite cloth to make number of plies and required orientation for wet layup assembly.

NOTE

Ply orientations correspond to warp direction of dry woven graphite cloth.

(1) Cut patch of four ply orientations; + 45°, 0°, 0°, and -45° plies shall be put on mold line surface. A 0.25 excess trim shall be left around periphery of each ply for final trimming to part/repair configuration. Final thickness after cure shall be approximately 0.072.

(2) Cut filler of 3 ply orientations; + 45°, 0°, and -45°. A 0.25 excess trim shall be left around periphery of each ply for final trimming to part configuration. Thickness after cure shall be approximately 0.054.

j. Wet layup procedures;

(1) Tape one layer of non-porous release fabric (teflon cloth) over clean flat surface. Teflon cloth shall be cut larger than dry woven graphite cloth.

(2) Prepare EA-956 adhesive (A1-F18AC-SRM-250, WP003 00).

(3) Apply layer of EA956 adhesive to teflon cloth.

(4) Position layer of dry woven graphite cloth on adhesive.

(5) Apply EA956 adhesive to dry side of dry woven graphite cloth.

(6) Position another layer of teflon cloth over saturated dry woven graphite cloth.

(7) Work EA956 adhesive into dry woven graphite cloth using roller or spatula. Dry woven graphite cloth must be evenly saturated with adhesive.

(8) Repeat process for all required dry woven graphite cloth plies.

(9) Using damaged part or another identical part as slave tool, lightly sand area with 240 grit abrasive paper where patch is to be applied to remove any surface protrusions.

(10) Tape one layer of teflon cloth over slave part where patch is to be fabricated/installed.

(11) Apply thin layer of adhesive to teflon cloth on slave part.

(12) Remove layer of teflon cloth from wetted dry woven graphite cloth ply and dispose.

(13) Making sure of correct ply and orientation, position wetted ply over teflon cloth on slave part.

(14) Remove second layer of teflon cloth from surface of installed ply and dispose.

(15) Repeat process for all required saturated plies.

k. Cure;

(1) Cover layup plies with one layer of release tape.

(2) For repair areas less than 12 inches square, puncture one perforation in center of teflon cloth.

(3) Position two layers of breather cloth on stacked assembly.

(4) Vacuum bag repair area.

(5) Cure for 2 hours at 190° F 10°F. Use two thermocouples next to layup area to monitor temperature.

l. Repair area preparation.

(1) Disassemble curing materials and equipment.

(2) Trim patch to specified dimensions to fit contour of repair area.



When sanding make sure not to damage remaining skin.

(3) Sand repair area with 240 grit abrasive paper.

(4) Vacuum repair area to remove sanding dust.

(5) Wipe repair area clean with clean dry cheesecloth.

m. Patch installation.

(1) Inspect precured wet layup for areas of low adhesive content or void.

(2) Pot, fill, with additional application of EA956 adhesive, if required.



Adhesive

8

(3) Bond precured wet layup assembly. Use staged, embossed FM300 adhesive, to install four ply precured patch assembly to door mold line where damaged material was removed (A1-F18AC-SRM-250, WP007 00).

(4) Trim three ply precured filler to fit on inner side of patch where damaged material was removed.



Adhesive

11

(5) Bond filler to inner surface of installed patch using EA9321 adhesive and scrim cloth.

(6) Cure repair area for 2 hours followed by 1 hour at 190°F 10°F using heat lamp.



When sanding make sure not to damage remaining skin.

n. After cure, sand filler flush with inner surface of door using 180 grit abrasive paper.

o. Drill fastener holes in patch from inner side. Maintain original fastener hole pattern (A1-F18AC-SRM-200, WP004 03).

p. Countersink fastener holes (A1-F18AC-SRM-200, WP004 08).

q. Install fasteners, as required, determine length on installation (A1-F18AC-SRM-200, WP004 06).

r. Using 240 grit abrasive paper, sand all cut edges of patches and form smooth transition from external patch to outer mold line of door.

s. Refinish repair area (A1-F18AC-SRM-500, WP042 00).

t. Install MLG outboard door (A1-F18AC-130-300, WP048 00).

21. **EXCESSIVE DOOR EDGE GAP REPAIR.** See figure 8. Use mating door or manufacture mold block to match configuration of mating door. When filling gap. Be sure mold block material will maintain correct shape while curing adhesive at required temperatures.

NOTE

Determine if door edge gap exceeds maximum gap limits, per figure 6.

22. Gap Repair of Graphite Epoxy Door Sill.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Toolset-Structural Repair, Composite Materials	74D110172

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047 Grit 180 and 240-9 X 11
Adhesive	EA9321 A/B
Cheesecloth	CCC-C-440 Type 1 Class 1
Cloth, Teflon, Non Porous Release Fabric	TEMP-R-GLAS 6TB
Mens Gloves, Cotton Work Gloves	MIL-G-3866 Type 1, Small or Medium
Pressure Sensitive Tape 1 Inch Wide	855-1.000 IN
Metal Spatula, Tongue Depressor	GG-D-226 Type 1

a. Prepare sill area to be repaired by sanding with 180 grit then 240 grit abrasive paper.

b. Clean area using clean dry cheesecloth.

c. Mask around outside edge of sill to be repaired with pressure sensitive tape to catch excess adhesive squeezeout.

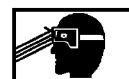


Wear clean cotton work gloves when making repairs to avoid contamination of bond surface.

d. Place one layer of release fabric between sill and mating door or mold block.

e. Tape release fabric to door or mold block.

f. Secure door or mold block to sill using c-clamps with back-up plates to prevent damage to door and sill.



Adhesive

11

g. Prepare adhesive, (A1-F18AC-SRM-200, WP011 00).

h. Apply EA9321 A/B adhesive with spatula, filling gap between sill and door or mold block.

i. Place layer of release fabric over repair area.

j. Attach back-up plate to sill using C-clamps to prevent sag of adhesive.

k. Cure at room temperature for 2 hours.

l. Remove c-clamps and back-up plate.

m. Cure at 190°F ± 10°F for 1 hour.

n. Remove pressure sensitive tape from repair area.

o. Clean excess EA9321 A/B adhesive at repair area to maintain trim gap using 240 grit abrasive paper.

p. Clean with dry cheesecloth.

q. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

23. Gap Repair of Aluminum Door Sill.

Support Equipment Required

Nomenclature	Part Number or Type Designation
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None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047 Grit 180 and 240-9 X 11
Adhesive	EA9321 A/B
Cheesecloth	CCC-C-440 Type 1 Class 1
Chemical Gloves, Rubber Gloves	ZZ-G-381, Type 1, Style 1, Small, Medium, Large
Cloth, Teflon, Non Porous Release Fabric	TEMP-R-GLAS 6TB
Mens Gloves, Cotton Work Gloves	MIL-G-3866 Type 1, Small or Medium
Metal Cleaner	222555
Aluminum Cleaning Material	
Pressure Sensitive Tape, One Inch Wide	855-1.000 IN
Primer, Adhesive	BR-127
Utility Apron	MIL-A-41829
General Purpose Apron	
Varnish Brush, Flat, 1/2-Inch	H-B-695 Type 1 Grade A Size 1-1/2

a. Mask around outside edge of sill to be repaired with pressure sensitive tape.

b. Sand repair area to uniform finish using 240 grit abrasive paper.

c. Wipe surface clean with clean, dry cheesecloth.



Metal Cleaner

12

d. Brush apply metal cleaner over exposed surface. Apply metal cleaner at room temperature. To keep metal cleaner from drying out, apply metal cleaner as required to keep metal cleaner wet for at least 15 minutes.



Wear clean cotton work gloves when making repairs to prevent contamination.

e. Wipe off metal cleaner with clean, dry cheesecloth.

f. Thoroughly remove any metal cleaner residue from bonding surface using clean cheesecloth saturated with tap water.

g. Check for water break free surface. Repeat steps d through g at least once so surface has been cleaned twice. If after second cleaning, water break occurs, repeat steps d through g until water break free. If water break free after two cleanings, continue to step h.

NOTE

After drying, if repair surface is not primed within 4 hours, cover repair surface with waxfree paper. If repair surface is not primed within 8 hours of cleaning, complete cleaning procedure must be repeated.

h. Remove tape mask.

i. Lightly wipe surface dry with clean dry cheese-cloth.

j. Dry bonding surface using hot air gun for 10 minutes, or allow to air dry for at least 30 minutes.



Adhesive Primer

13

NOTE

Primer must be stirred and mixed before use. Solids in primer will settle out quickly. Stir primer continuously while being used. Do not apply primer liberally to bonding surface.

k. After drying, use clean cheesecloth to make pad for applying primer.

l. Moisten pad with primer.

m. Wipe bonding surface lightly with pad.

n. Cure primer for 30 minutes at room temperature.

o. Cure with heat blanket for 1 hour at 225°F ± 10°F.

p. Mask around outside edge of sill, to be repaired, with pressure sensitive tape, to catch excess adhesive squeezeout.

q. Place one layer of release fabric between sill and mating door or mold block.

r. Tape release fabric to door or mold block.

s. Secure door or mold block to sill using c-clamps with back-up plates to prevent damage to door and sill.



Adhesive

11

t. Prepare EA9321 adhesive, (A1-F18AC-SRM-200, WP011 00).

u. Apply adhesive with spatula, filling gap between sill and door or mold block.

v. Place layer of release fabric over repair area.

w. Attach back-up plate to sill using c-clamps to prevent sag of adhesive.

x. Cure at room temperature for 2 hours, then cure at 190°F ± 10°F for 1 hour.

y. Remove pressure sensitive tape from repair area.

z. Clean excess adhesive at repair area to maintain trim gap, using 240 grit abrasive paper.

aa. Clean with dry cheesecloth.

ab. Refinish repair area, (A1-F18AC-SRM-500, WP042 00).

24. INBOARD EDGE REPAIR, INTERMEDIATE MAINTENANCE. See figure 9.

Support Equipment Required

Nomenclature	Part Number or Type Designation
	None

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper, Silicone Carbide, Waterproof	A-A-1047 Grit 240-9 X 11
Adhesive	EA956
Cloth, Graphite	-
Cloth, Nylon, Scrim	Pattern 30
Pressure Sensitive Tape, One Inch Wide	855-1.000 IN
Tedlar Film	200SG40 TR, 2 Mil Thick
Teflon Release Agent	MS122

a. Remove MLG outboard door (A1-F18AC-130-300, WP048 00).

b. Determine if damage is within repairable limits. Damage exceeding limits below require depot engineering disposition.

(1) Length does not exceed 8 inches.

(2) Distance between damages at least 4 inches.

(3) Damage does not exist within 6 inches of leading edge or within 2 inches of trailing edge.

(4) After trimming damage, at least 0.2 inch of original bondline between honeycomb core and trimmed edge is intact.

c. Trim damage as shown. For trimming (A1-F18AC-SRM-200, WP004 08).

d. Do NDI to make sure 0.2 inch of original bondline between honeycomb core and trimmed edge is intact. If 0.2 inch does not exist, depot engineering disposition is required. For NDI (A1-F18AC-SRM-300, WP005 00).



To prevent more damage, do not sand into base material of door when removing finish.

e. Remove surface finish where inner and outer mold line plies will be bonded.

f. Determine number of filler plies required by measuring step depth. If step depth is less than 0.030 inch, one filler ply is required on each step. If step depth is more than 0.030 inch, two filler plies are required on each step.

g. Place graphite cloth on layer of tedlar film.



Adhesive



4

h. Saturate enough cloth with EA956 adhesive to fabricate number of filler plies determined in step f.

i. Place another layer of tedlar film over cloth and work adhesive into cloth.

NOTE

If four filler plies are required, cut inner plies at 45° and outer plies at 0° orientation.

j. Cut cloth to size and orientation. Allow 0.05 inch excess material for final trimming.



To prevent damage to door, make sure inner mold line backup plate does not rest on core ramp and outer mold line backup plate does not rest on recess edge.

k. Fabricate two backup plates as required to cover repair area.

l. Apply release agent to surface of backup plates that will mate door.

m. Secure inner mold line backup plate into position with tape.

n. Lay filler plies in position.



To prevent damage, make sure clamps are not installed directly over filler plies.

o. Locate and clamp outer mold line backup plate to inner mold line backup plate.

p. Cure repair by air cure for 5 hours or heat blanket (A1-F18AC-SRM-250, WP004 00).

q. Remove clamps and backup plates.

NOTE

Do not remove excess edge material.

r. Sand surfaces smooth.

s. Saturate enough graphite cloth with EA956 adhesive to fabricate inner and outer mold line plies.

t. Cut graphite cloth to size and orientation for inner and outer mold line plies. Allow 0.50 excess material for final trimming.

u. Cut scrim cloth to same size as inner and outer plies.

v. Apply EA956 adhesive to inner and outer mold line bonding surfaces.

w. Lay scrim cloth on wet EA956 adhesive.

x. Position inner and outer mold line plies.

y. Cure repair using AM-D-O-MDA1S1-101, -103, -105, or -107 heat/vacuum blanket (Detail F and A1-F18AC-SRM-250, WP004 00).

z. Sand forward and aft ends of outer mold line ply flush with existing mold line.

aa. Trim excess material from repair edge. For trimming (A1-F18AC-SRM-200, WP004 08).

ab. Refinish repaired area (A1-F18AC-SRM-500, WP042 00).

ac. Install MLG inboard door (A1-F18AC-130-300, WP048 00).

25. LEADING EDGE OUTER SKIN REPAIR, INTERMEDIATE MAINTENANCE. See figure 10.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source Repair Set	- 74D110165

Materials Required

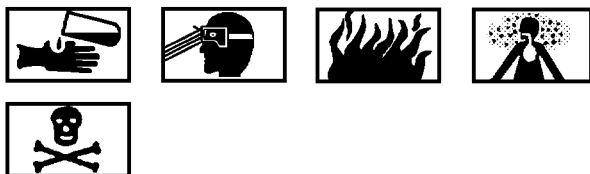
Nomenclature	Specification or Part Number
Adhesive	EA956
C-Clamps, as Required	-
Connector	MS3101R16-10P
Disposable Applicator	6-143
Cotton Swabs	
Hypodermic Syringe	GG-N-196
Methyl Isobutyl Ketone (ACS Grade)	ASTM D1153 per O-C-265 (6810-00-052-1371)
Primer Adhesive	BR-127
Sealing Compound	MIL-S-83430 Class B-4
Solid Rivet	CSR904B-4-()
Solid Rivet	CSR904B-5-()
Titanium Sheet, 6 AL-4V, 0.063, 8.30 X 1.25	MIL-T-9046
Toothpicks or Equivalent	-
Wood Blocks, As Required	-



Use light C-clamp pressure to prevent damage to graphite epoxy skin.

a. Clamp door just aft of unbond area to prevent more damage during repair, see figure 10.

b. Use toothpicks or equivalent to open unbond area to allow for cleaning and adhesive injection, see figure 10.



Methyl Isobutyl Ketone

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c. Using hypodermic syringe filled with methyl isobutyl ketone thoroughly flush unbond area.

d. Dry flushed, cleaned, unbond area using 250 watt infrared heat source at 160°F plus or minus 10°F for 30 minutes. Connect infrared heat source to 74D110165 repair set temperature controller with MS3101R16-10P connector.

e. After thoroughly drying unbond area inject unbond area with EA956 adhesive (A1-F18AC-SRM-250, WP015 00).

f. Remove toothpicks or equivalent before clamping unbond area for cure.



Use light C-clamp pressure to prevent damage to graphite epoxy skin.

g. Clamp unbond skin to titanium former mold line flange use C-clamp and wood blocks, see figure 10.



Adhesive

4

h. Cure EA956 adhesive using 250 watt infrared heat source at 190°F plus or minus 10°F for 1 hour. Connect infrared heat source to 74D110165 repair set temperature controller with MS3101R16-10P connector.



Make sure hole edge distance is maintained so holes do not run through web of titanium former.

i. Carefully locate rivet holes on door as shown in figure 10. Rivet holes are located relative to leading edge of titanium former.



Control drilling depth to prevent drilling into titanium former flange on opposite surface.

j. Drill rivet holes in door as shown in figure 10 and hole preparation (A1-F18AC-SRM-200, WP004 08). Use drill speeds listed for 5/32-inch diameter holes.

k. Make titanium strap, see figure 10.

l. Form titanium strap to approximate outer skin curvature.

m. Carefully locate titanium strap on outer skin of door to make sure of 0.30 inch overlap of the titanium former mold line flange, see detail C.

n. Carefully locate rivet holes on titanium strap, for match drilling, as shown in figure 10. Rivet holes are located relative to leading edge of titanium former.

o. Drill rivet holes in titanium strap (A1-F18AC-SRM-200, WP004 02).



Adhesive Primer

13

p. Prime titanium strap with BR-127. Prime titanium strap on bond side to light yellow-green color as below:

(1) Apply primer adhesive by spraying or use cotton swabs.

(2) Dry primer adhesive at room temperature for 30 minutes.

(3) Cure primer using 250 watt infrared heat source at 240°F +25°F for 1 hour. Connect infrared heat source to 74D110165 repair set temperature controller with MS3101R16-10P connector.



Sealing Compound

7

q. Fay seal titanium strap to mold line with MIL-S-83430 sealant. Prepare and apply high temperature sealing compound (A1-F18AC-SRM-200, WP011 00).

r. Squeeze install rivets wet with MIL-S-83430 high temperature sealing compound. Prepare and apply sealant (A1-F18AC-SRM-200, WP011 00).

s. Refinish repair area (A1-F18AC-SRM-500, WP042 00).

26. LEADING EDGE INBOARD CORNER REPAIR. See figure 11.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source	-
Repair Set	74D110165

Materials Required

Nomenclature	Specification or Part Number
Adhesive	EA956
C-Clamps, as Required	-
Connector	MS3101R16-10P
Hypodermic Syringe	GG-N-196
Methyl Isobutyl Ketone (ACS Grade)	ASTM D1153 per O-C-265 (6810-00-052-1371)
Sealing Compound	MIL-S-83430 Class A-4
Solid Rivet	CSR904B-5-()
Toothpicks or Equivalent	-
Washer, 2 Required	AN960C8



Use light C-clamp pressure to prevent damage to graphite epoxy skin.

a. Clamp door just aft of unbond area to prevent more damage during repair, see figure 11.

b. Use toothpick(s) or equivalent to open unbond area to allow for cleaning and adhesive injection, see figure 11.



Methyl Isobutyl Ketone

16

c. Using hypodermic syringe filled with methyl isobutyl ketone thoroughly flush unbond area.

d. Dry flushed, cleaned, unbond area using 250 watt infrared heat source at 160°F plus or minus 10°F for 30 minutes. Connect infrared heat source to 74D110165 repair set temperature controller with MS3101R16-10P connector. Maintain good cross flow ventilation.



Adhesive



4

e. After thoroughly drying unbond area inject unbond area with EA956 adhesive (A1-F18AC-SRM-250, WP015 00).

f. Remove toothpick(s) or equivalent before clamping unbond area for cure.



Use light C-clamp pressure to prevent damage to graphite epoxy skin.

g. Clamp unbond area.

h. Cure EA956 adhesive using 250 watt infrared heat source at 190°F plus or minus 10°F for 1 hour. Connect infrared heat source to 74D110165 repair set temperature controller with MS3101R16-10P connector.

i. Locate rivet hole as shown in figure 11.

j. Countersink rivet hole on outer skin surface.



Sealing Compound

7

k. Squeeze install solid rivet wet with MIL-S-83430 high temperature sealing compound and two washers under upset head.

l. Prepare and apply sealant (A1-F18AC-SRM-200, WP011 00).

m. Refinish repair area (A1-F18AC-SRM-500, WP042 00).

27. OUTBOARD EDGE REPAIR, INTERMEDIATE MAINTENANCE. See figure 12.

Support Equipment Required

Nomenclature	Part Number or Type Designation
250 Watt Infrared Heat Source	-

Materials Required

Nomenclature	Specification or Part Number
Abrasive Paper	A-A-1047 Grit 240-9 X 11
Adhesive	EA956
Hypodermic Syringe	GG-N-196
Methyl Isobutyl Ketone (ACS Grade)	ASTM D1153 per O-C-265 (6810-00-052-1371)

a. Remove MLG outboard door (A1-F18AC-130-300, WP048 00).

b. Determine if damage is within repairable limits. Damage exceeding limits below require depot engineering disposition.

(1) Damage is delamination of inner or outer skin plies or unbond between skin and former.

(2) Damage may extend between hinges, but may not be closer than 0.75 inch to either hinge.

(3) Delamination or unbond may not extend over honeycomb core.



Methyl Isobutyl Ketone

16

c. Clean out delamination using a hypodermic syringe to inject methyl isobutyl ketone.

d. Dry delamination using a 250 Watt infrared heat source.



Adhesive

4

e. Inject EA956 adhesive into delamination, (A1-F18AC-SRM-250, WP015 00).

f. Do NDI on repair (A1-F18AC-SRM-300, WP076 02).

g. Sand area to a smooth finish with 240 grit abrasive paper.

h. Finish (A1-F18AC-SRM-500, WP042 00).

i. Reinstall MLG outboard door (A1-F18AC-130-300, WP048 00).

28. REPLACEMENT.

29. Door is spared with excess trim.

a. Replace door (A1-F18AC-130-300, WP048 00).

b. Trim door to maintain trim gap. See figure 6. For trimming (A1-F18AC-SRM-200, WP004 08).

c. Refinish if required (A1-F18AC-SRM-500, WP042 00).

Table 1. Patch Selection for Class III Damage








Injection Hole Spacing	Graphite Epoxy Single Patch		Titanium Patch Single Patch	
	 No.	Dia.	 No.	Dia.
0.50 to 1.25	-1003	2.25	-	-
1.25 to 1.75	-1001 or -1005	2.75	-2001	2.75
1.75 to 2.00	-	-	-2003	3.00
2.00 to 3.00	-1007	4.00	-2005	4.00
NOTES 1. For graphite epoxy patch only FM300 shall be used. Either EA9321 or FM300 adhesive may be used for titanium patch.  Dash number of 74K000002 kit.  Dash number of 74K000003 Kit.				

Table 2. Patch Selection for Repair Zone A1, Graphite Epoxy and Titanium Patches

Damage Size (Dia)	Gr. Epoxy Patch Single Patch		Titanium Patch Single Patch		Titanium Patch Two Patches	
	 No.	Dia.	 No.	Dia.	 No.	Dia.
0.00 to 0.25	-1001	2.75	-2001	2.75	-	-
0.25 to 1.50	-1007	4.00	-2005	4.00	-	-
1.50 to 2.75	-1009	5.25	-2023	9.75	-2009 -2007	5.25
2.75 to 4.00	-1011	6.50	-2031	12.25	-2013 -2011	6.50
4.00 to 5.25	-1013	7.75	-	-	-2017 -2015	7.75
5.25 to 6.00	-1015	9.00	-	-	-2019 -2017	8.50

NOTES

1. For graphite epoxy patch only FM300 shall be used. Either EA9321 or FM300 adhesive may be used for titanium patch.

 Dash number of 74K000002 kit.


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Table 3. Patch Selection for Repair Zone A2, Graphite Epoxy and Titanium Patches









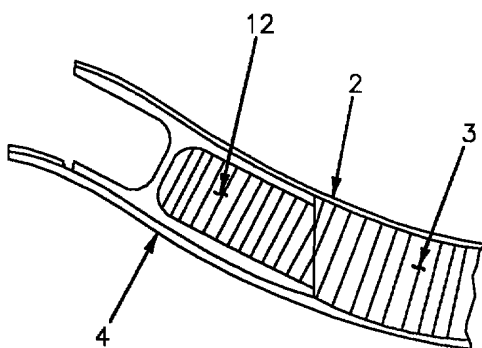
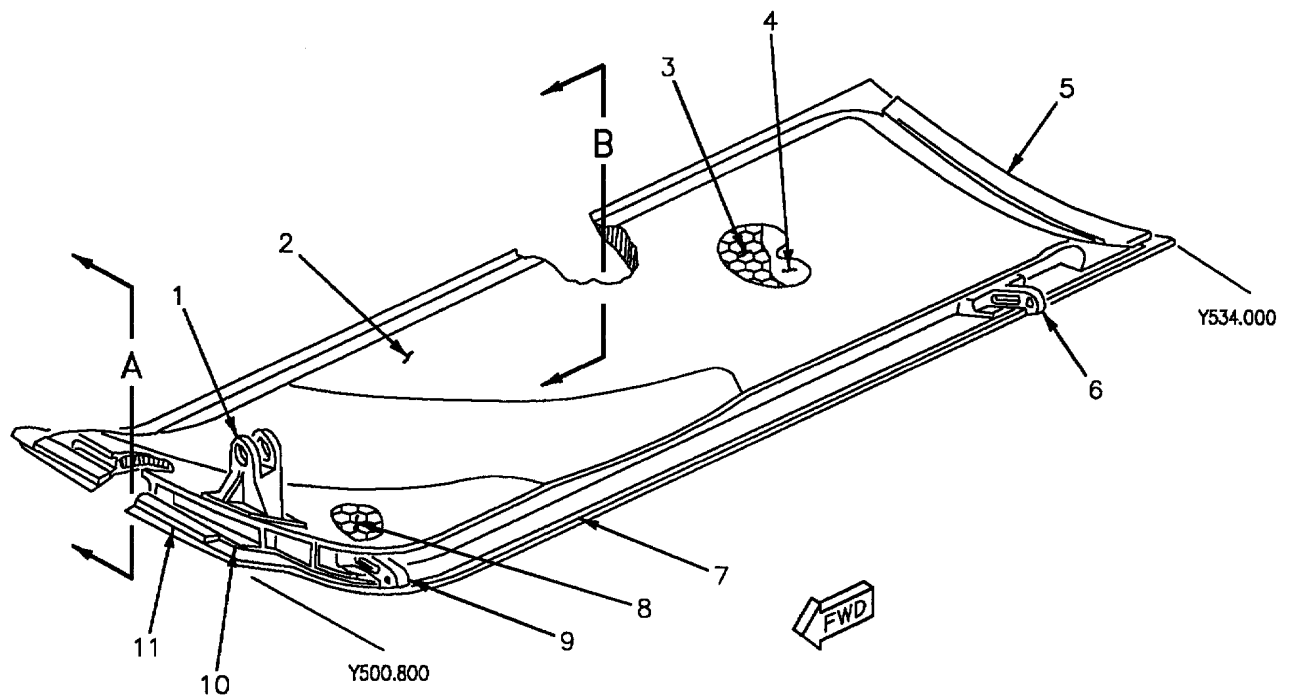
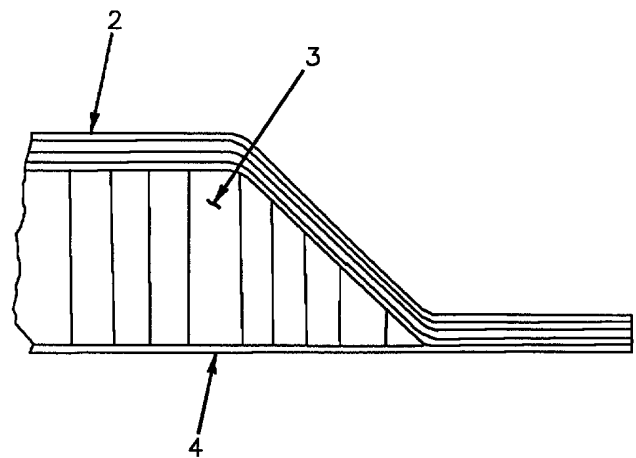
Damage Size (Dia)	Graphite Epoxy Single Patch		Titanium Patch Two Patches	
	 No.	Dia.	 No.	Dia.
0.00 to 0.25	-1005	2.75	-2003 -2001	3.50
0.25 to 1.50	-1007	4.00	-2005 -2003	4.00
1.50 to 2.75	-1009	5.25	-2009 -2007	5.25
2.75 to 4.00	-1011	6.50	-2013 -2011	6.50
4.00 to 5.25	-1013	7.75	-2017 -2015	7.75
5.25 to 6.00	-1015	9.00	-2021 -2019	9.00
NOTES 1. For graphite epoxy patch only FM300 shall be used. Either EA9321 or FM300 adhesive may be used for titanium patch.  Dash number of 74K000002 kit.  Dash number of 74K000003 kit.				

Table 4. Patch Selection for Repair Zone B2, Graphite Epoxy and Titanium Patches

Damage Size (Dia)	Graphite Epoxy Patch Two Patches		Titanium Patch Three Patches	
	 No.	Dia.	 No.	Dia.
0.00 to 0.25	-1007 -1005	4.00	-2005 -2003 -2035	4.00
0.25 to 1.50	-1009 -1007	5.25	-2009 -2007 -2037	5.25
1.50 to 2.75	-1011 -1009	6.50	-2013 -2011 -2039	6.50
2.75 to 4.00	-1013 -1011	7.95	-2017 -2015 -2041	7.75
4.00 to 5.25	-1015 -1013	9.00	-2021 -2019 -2043	9.00
5.25 to 6.00	-1017 -1015	10.25	-2025 -2023 -2045	10.25
NOTES 1. FM300 adhesive is required in zone B2.  Dash number of 74K000002 kit.  Dash number of 74K000003 kit.				



A



B

Figure 1. Material Index (Sheet 1)

Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Actuator Fitting 74A426054-2009, -2010	Bar	7075-T73511 Al Aly
2	 	Skin, Inner 74A426060-1013, -1014 74A426060-1015, -1016 74A426060-1017, -1018	Sheet	Graphite Epoxy Laminate
3	 	Core 74A426062-2009, -2010 74A426062-2015, -2016 74A426062-2017, -2018	Sheet	5056-H39 Al Aly Honeycomb
4	 	Skin, Outer 74A426061-1003, -1004 74A426061-1009, -1010	Sheet	Graphite Epoxy Laminate
5	 	Rub Strip 74A426060-2011 74A426060-2061 74A426060-2081		
6		Hinge Half 74A426053-2007	Forging	7075-T73 Al Aly
7		Former 74A426063-2003, -2004	Bar	6Al-4V Ti Anl
8		Core 74A426062-2013, -2014		5056-H39 Al Aly Honeycomb
9		Hinge Half 74A426051-2007, -2008	Forging	7075-T73 Al Aly
10	 	Former 74A426064-2005, -2006 74A426064-9001 74A426064-9002 74A426064-2007 74A426064-2008	Bar	6Al-4V Ti Anl
11	 	Rub Strip 74A426060-2015, -2016 74A426060-2063		

Figure 1. Material Index (Sheet 2)


















Idx No.	Eft	Nomenclature and Part No.	Description	Material
12		Core 74A426062-2011, -2012		5056-H39 Al Aly Honeycomb
<p style="text-align: center;">LEGEND</p> <p> Skin is made of graphite epoxy laminate.</p> <p> Eighty cells per foot, 0.0014 inch thick foil.</p> <p> Rub strip is made of glass epoxy laminate.</p> <p> 161353 THRU 161705, 161707.</p> <p> 161706, 161708 AND UP.</p> <p> 161353 THRU 161761.</p> <p> 161706, 161708 THRU 161761.</p> <p> 161924 AND UP.</p> <p> 161924 THRU 161933, 161967 THRU 161969.</p> <p> 161925, 161963 THRU 161965.</p> <p> 161934 THRU 161966, 161970 AND UP.</p> <p> 161926 THRU 161962, 161966 AND UP.</p> <p> 161706, 161708 THRU 161759.</p> <p> 161760 AND UP.</p> <p> 161353 THRU 161759.</p> <p> 161760 AND UP.</p>				

Figure 1. Material Index (Sheet 3)

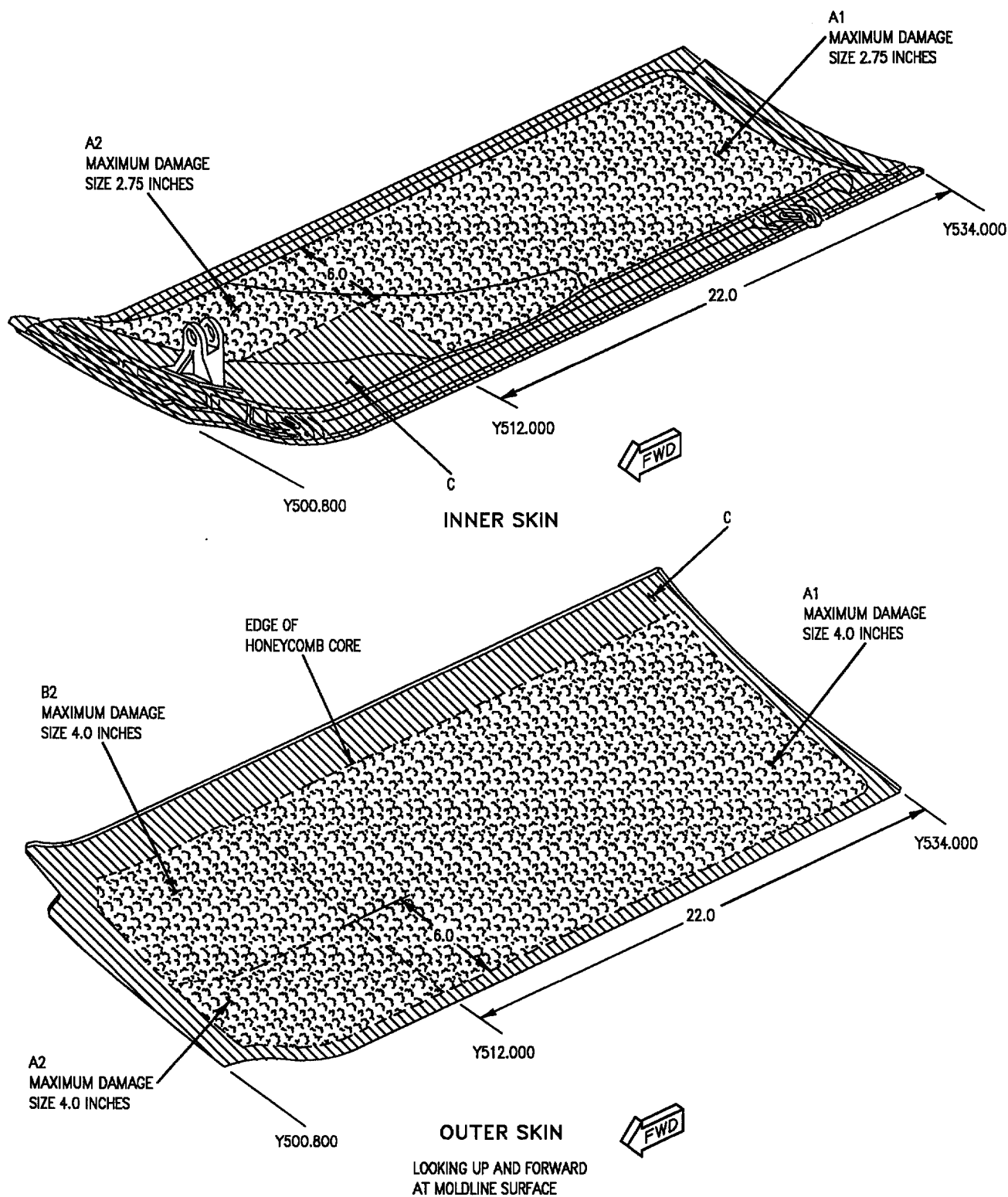


Figure 2. Repair Zones

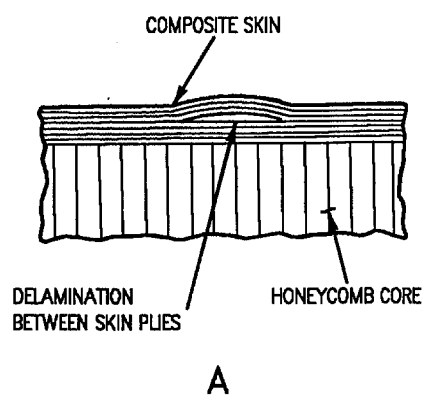
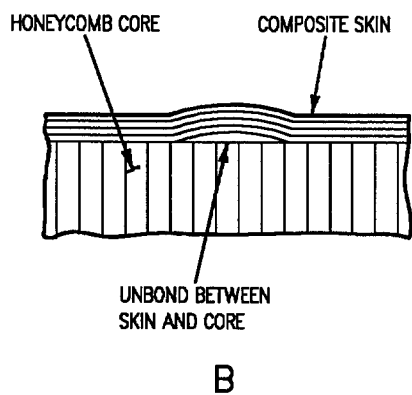
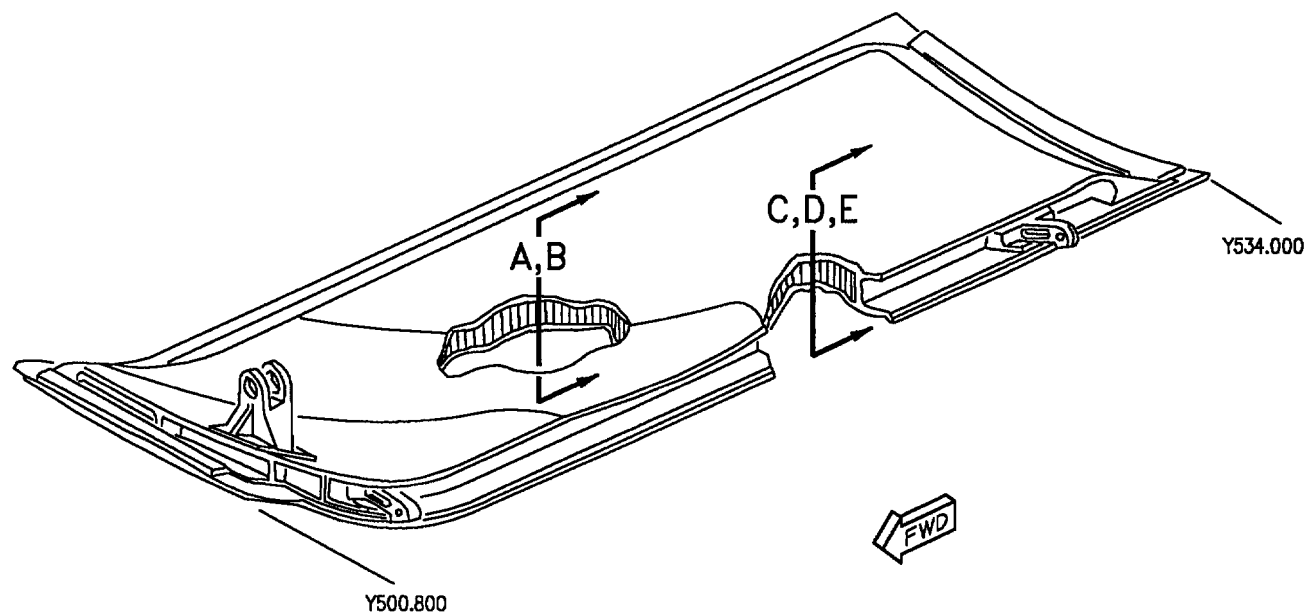


Figure 3. Negligible Damage (Sheet 1)

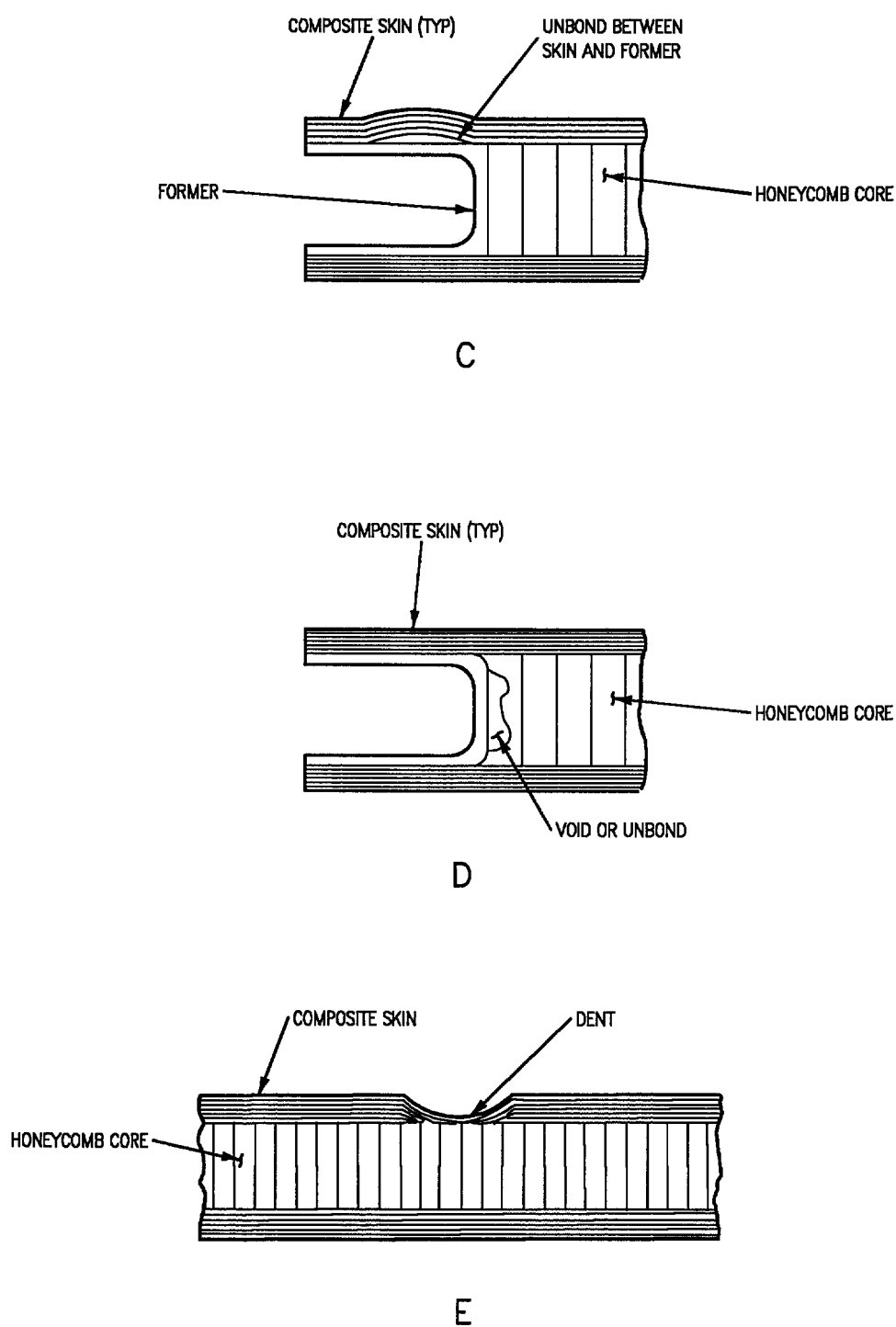


Figure 3. Negligible Damage (Sheet 2)

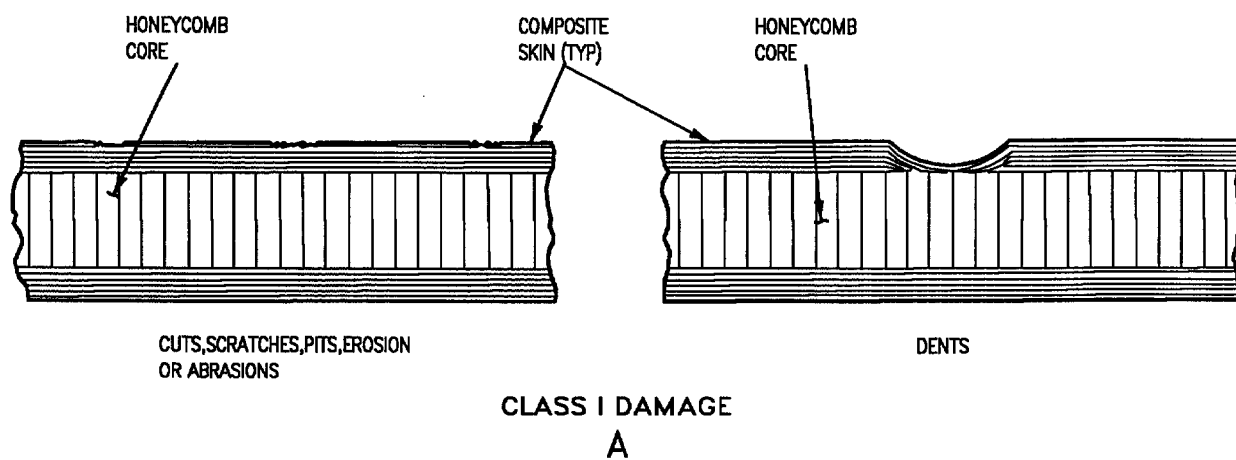
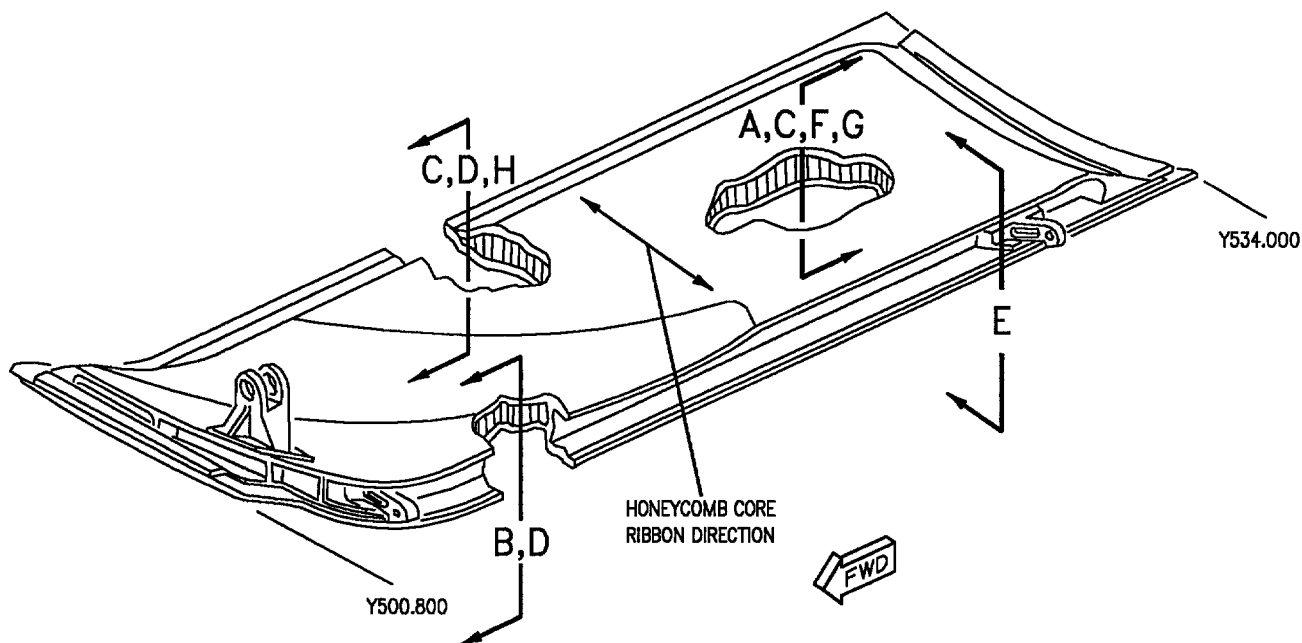


Figure 4. Repairable Damage (Sheet 1)

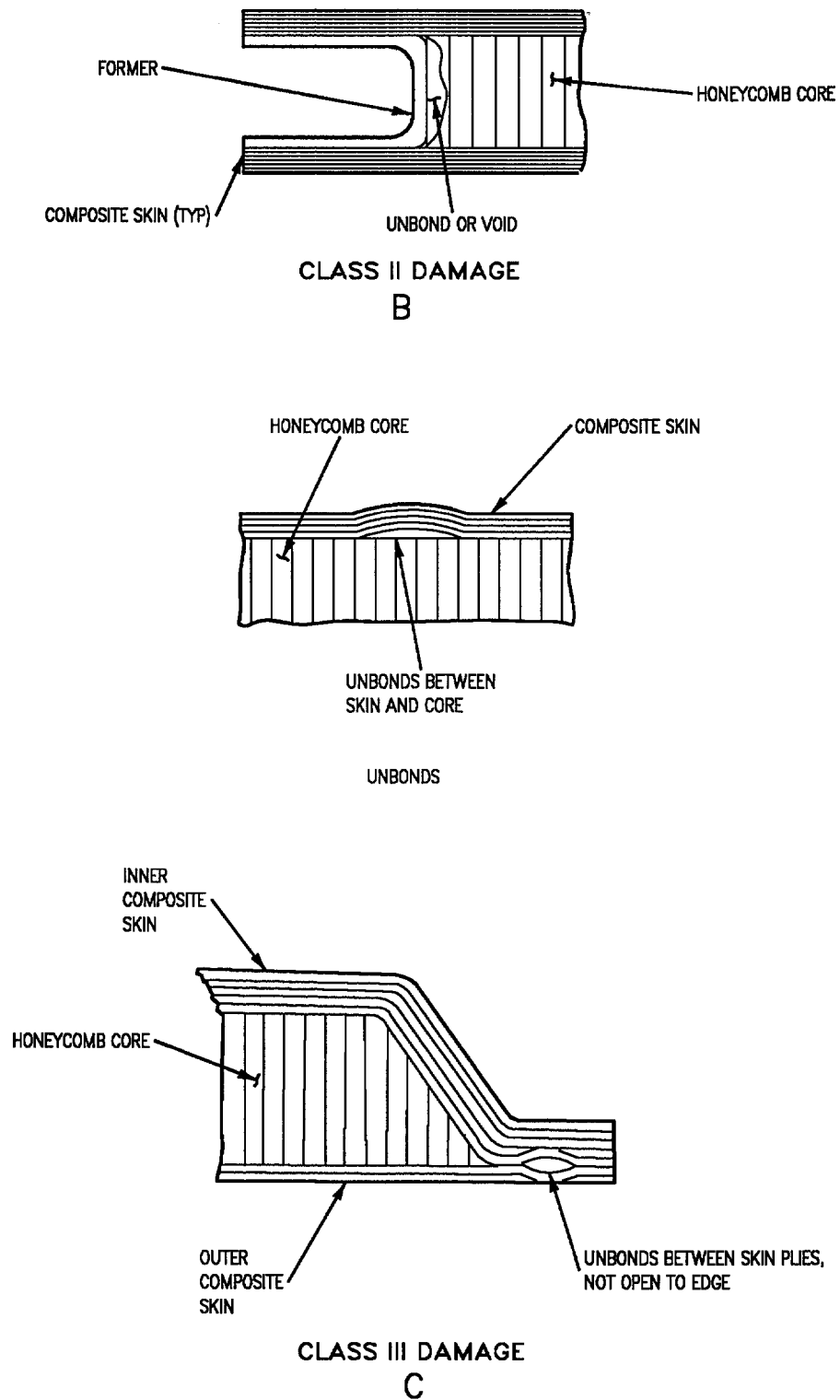


Figure 4. Repairable Damage (Sheet 2)

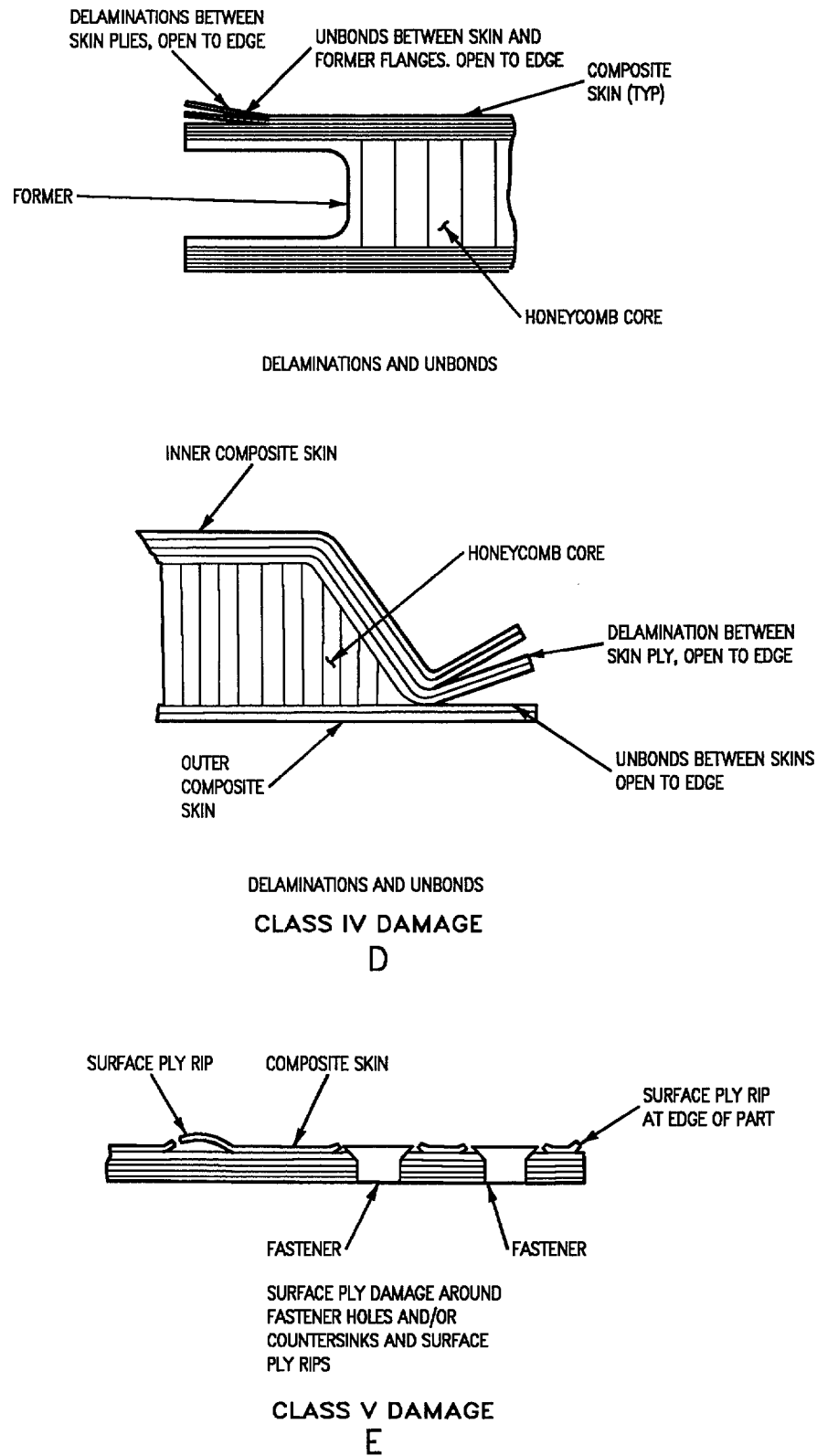
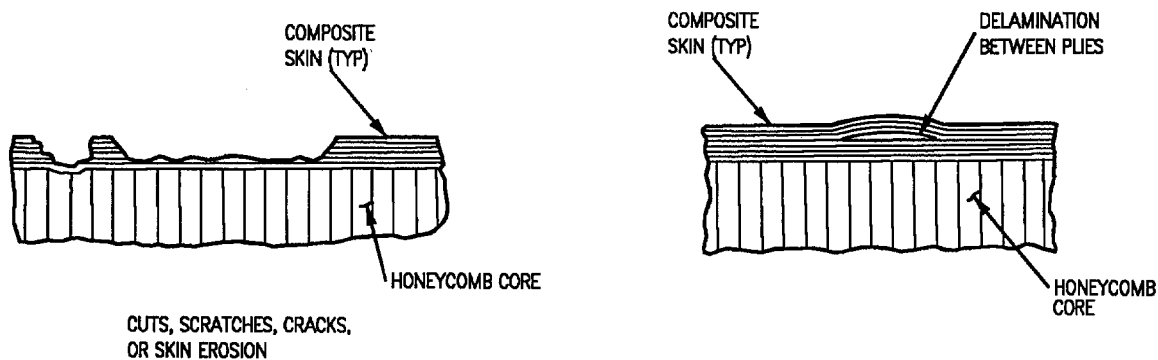
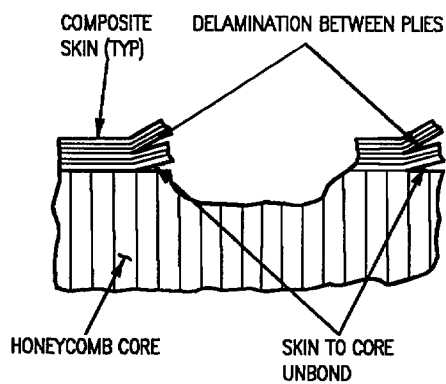
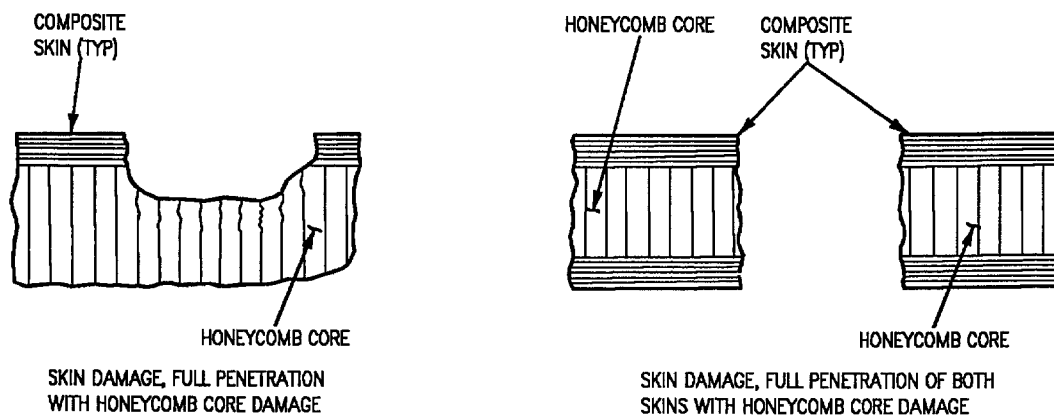


Figure 4. Repairable Damage (Sheet 3)

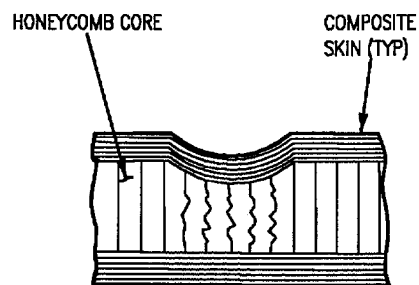


CLASS VI DAMAGE

F



SKIN DAMAGE, FULL PENETRATION OF ONE OR BOTH SKINS, DELAMINATION OF PLIES OPEN TO DAMAGE, PLIES TO CORE UNBOND OPEN TO DAMAGE



DENTS WITH CRUSHED CORE

CLASS VII DAMAGE

G

Figure 4. Repairable Damage (Sheet 4)

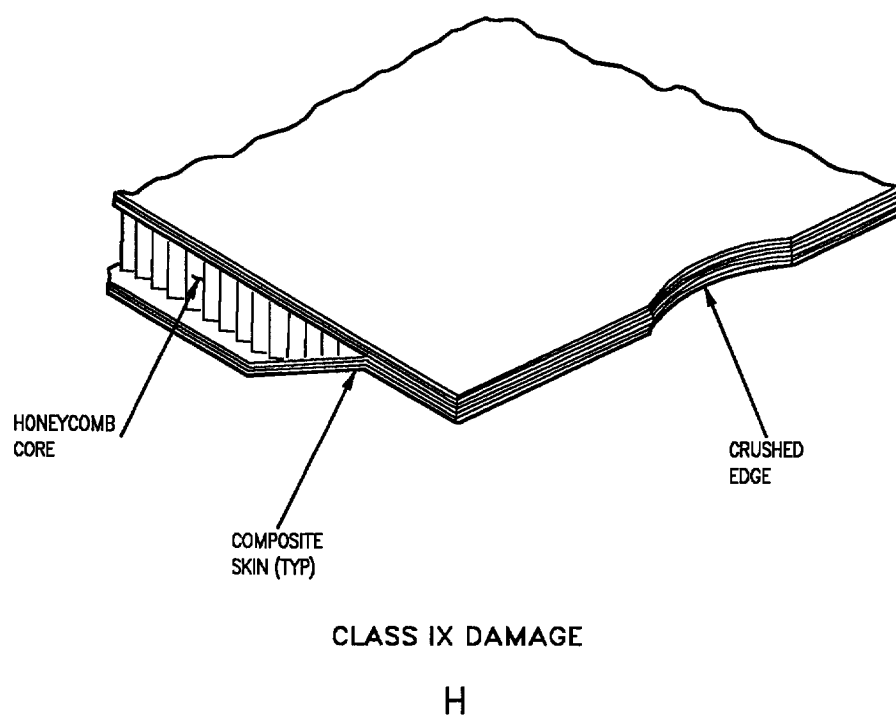


Figure 4. Repairable Damage (Sheet 5)

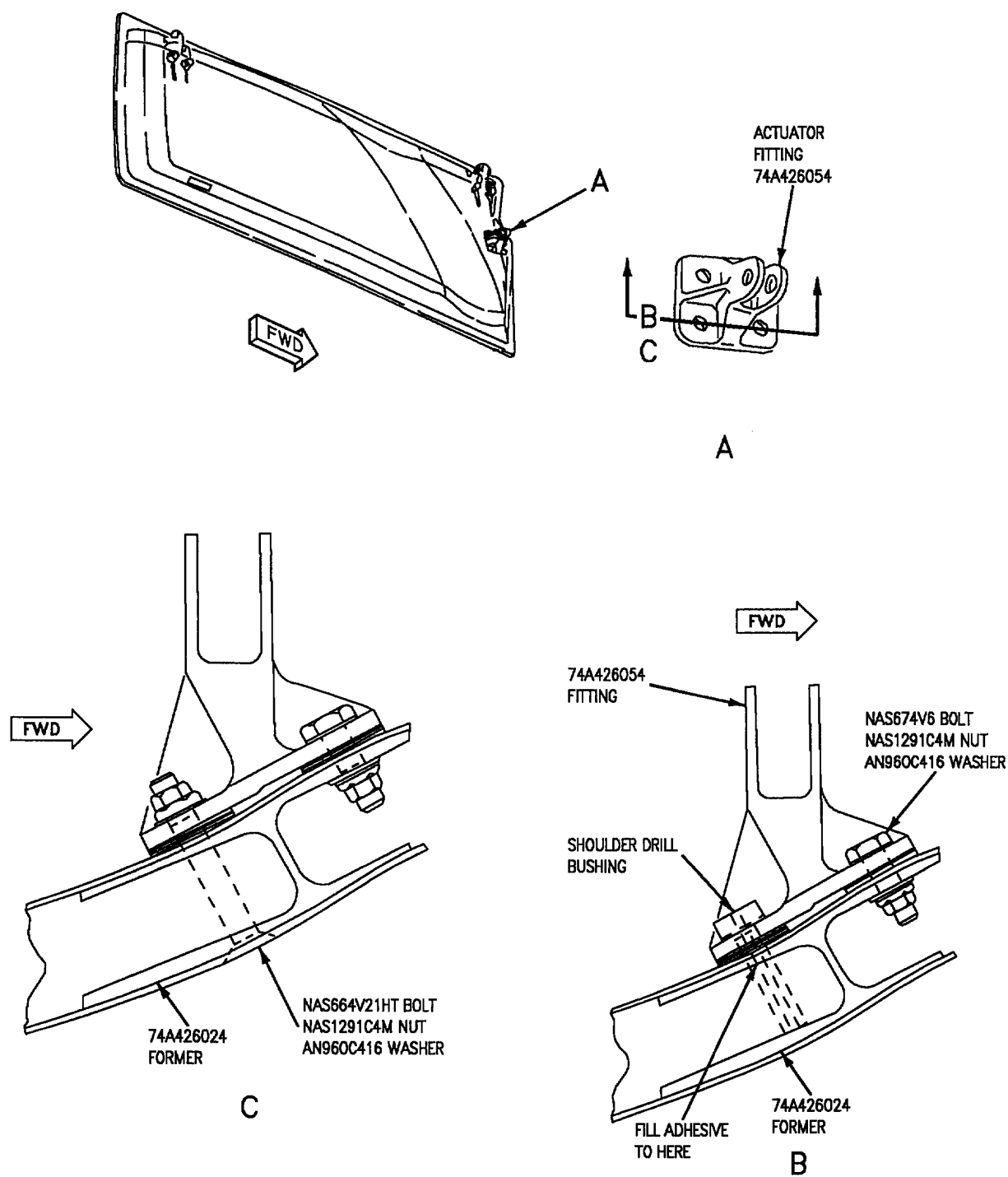


Figure 5. Actuator Fitting, 74A426054, Repair

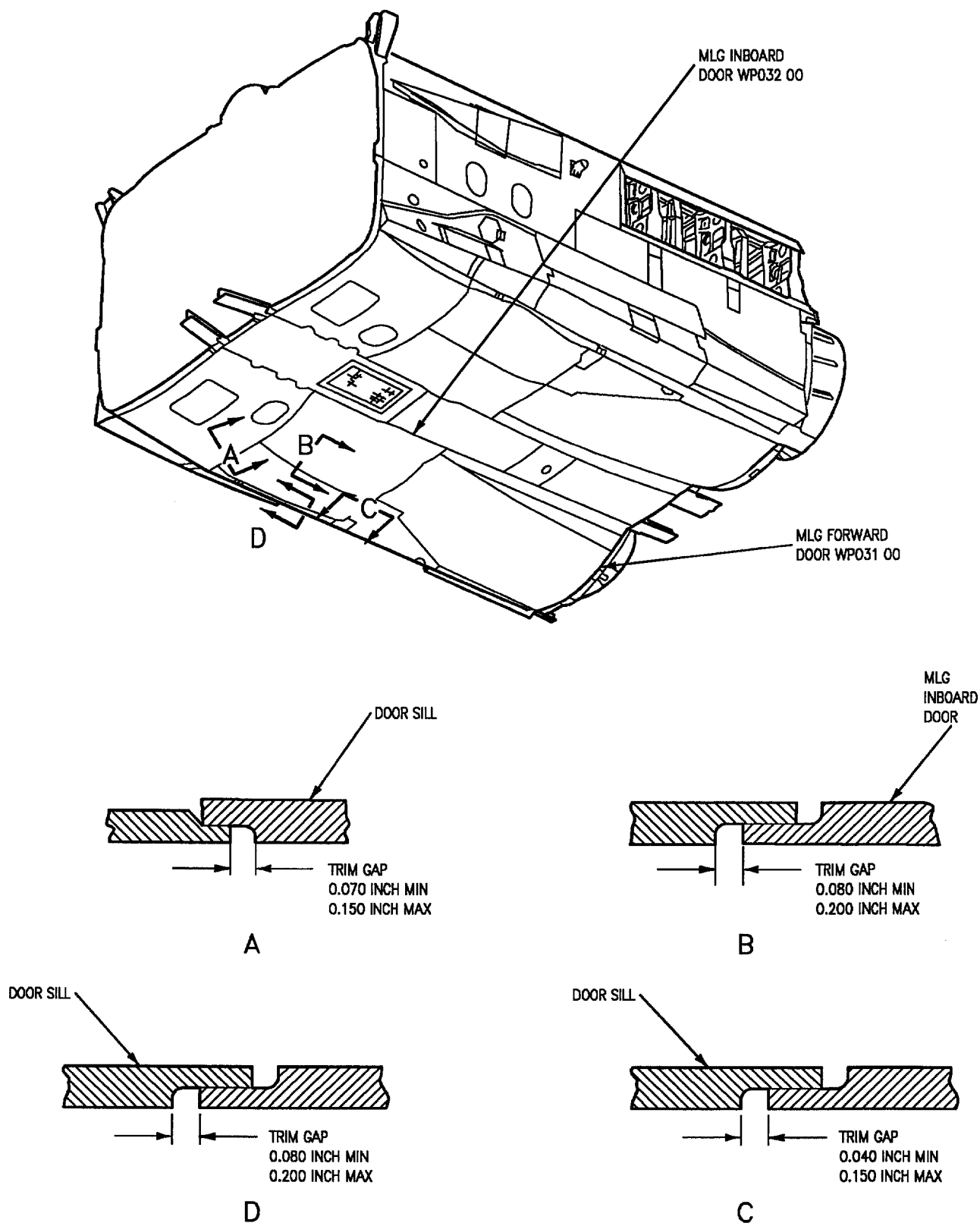


Figure 6. Replacement Trim Gap

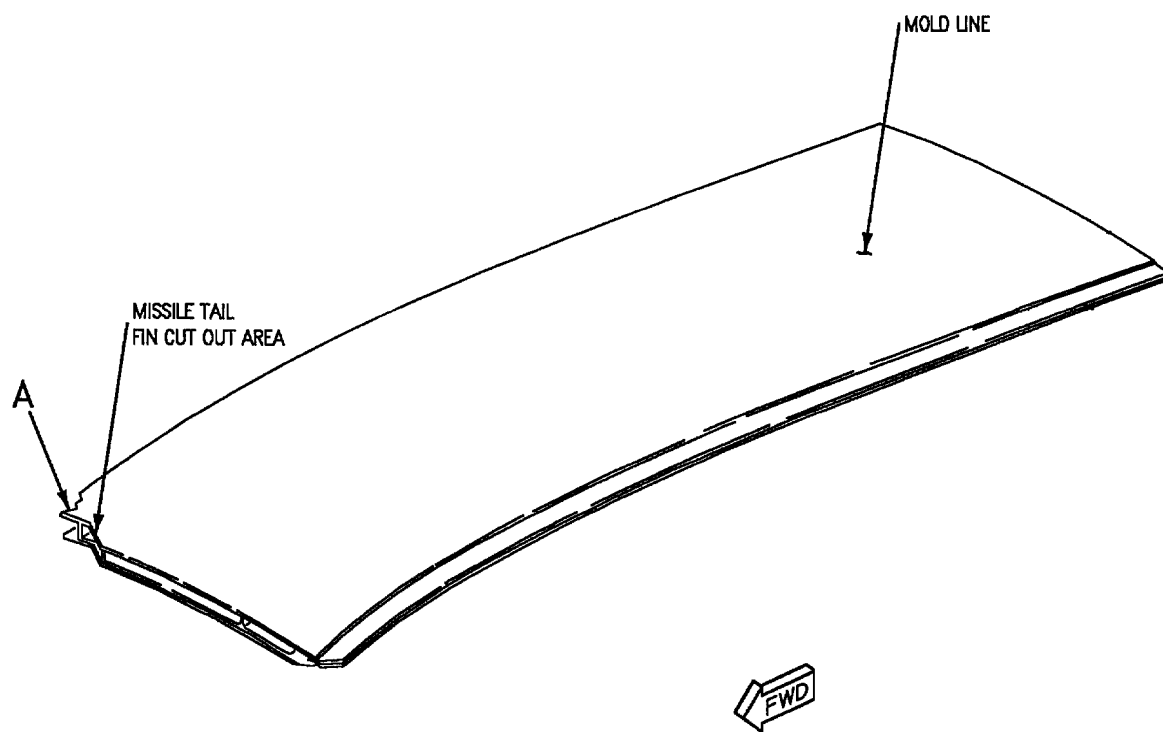


Figure 7. Leading Edge Repair (Sheet 1)

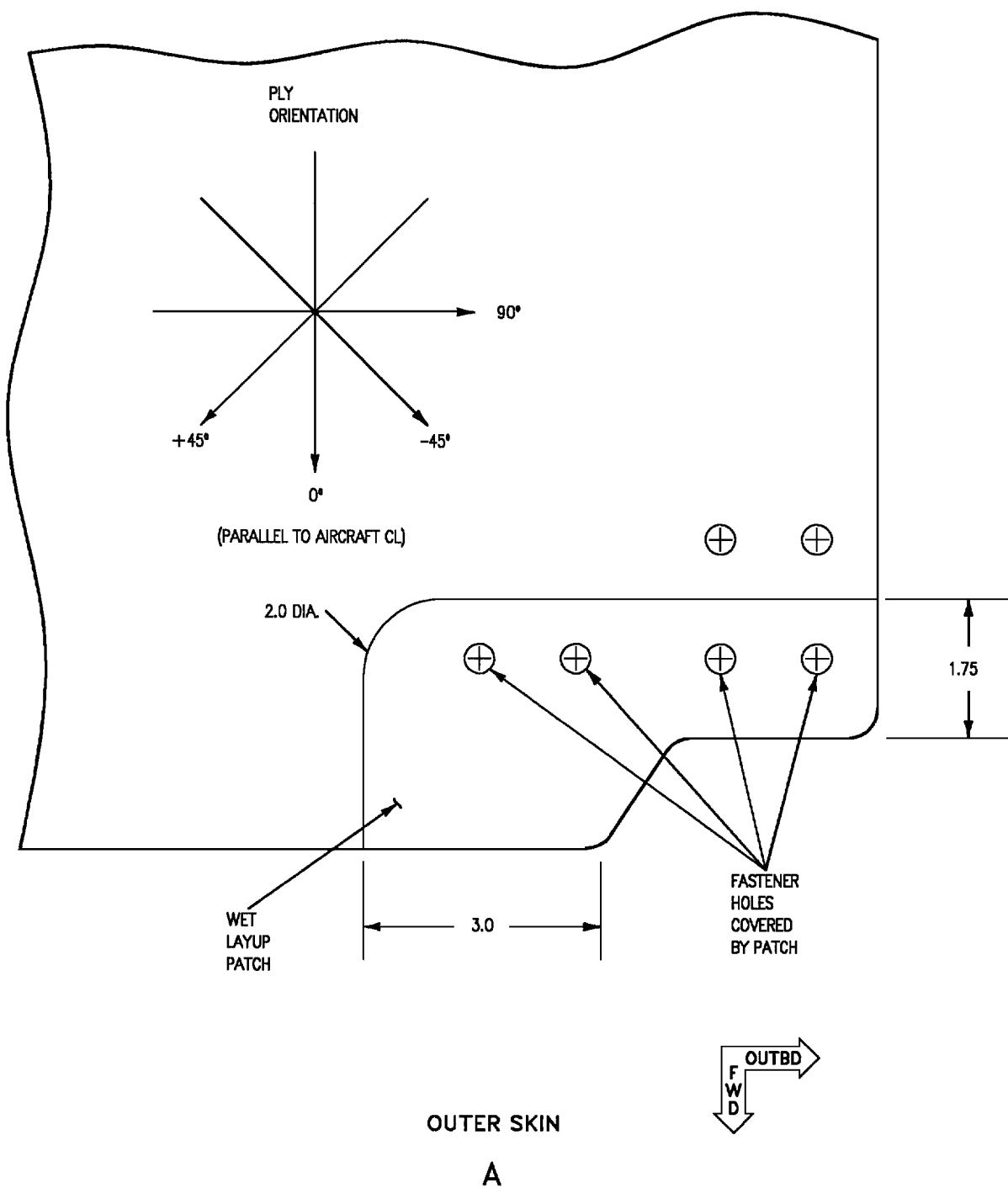


Figure 7. Leading Edge Repair (Sheet 2)

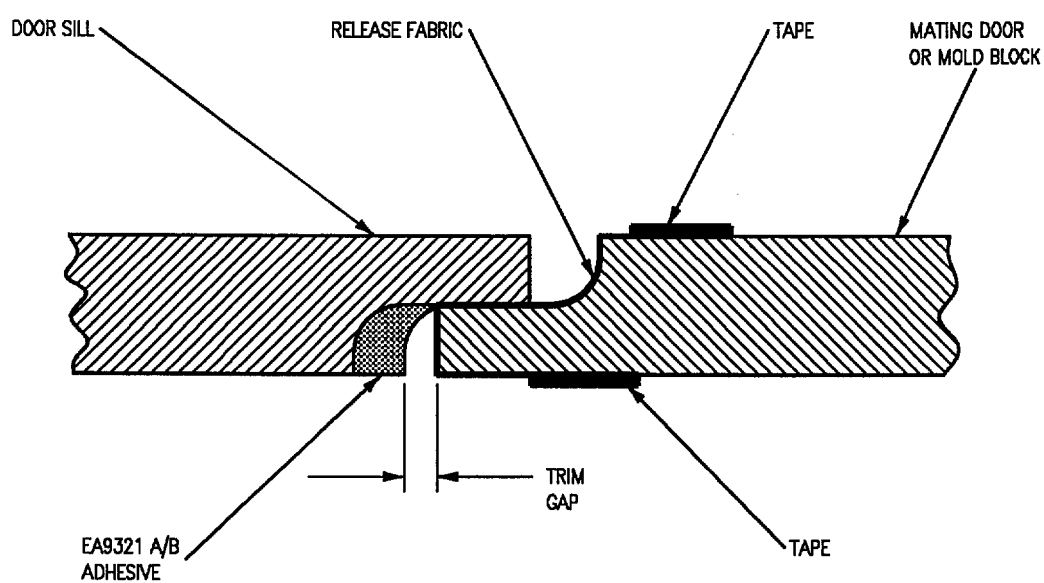
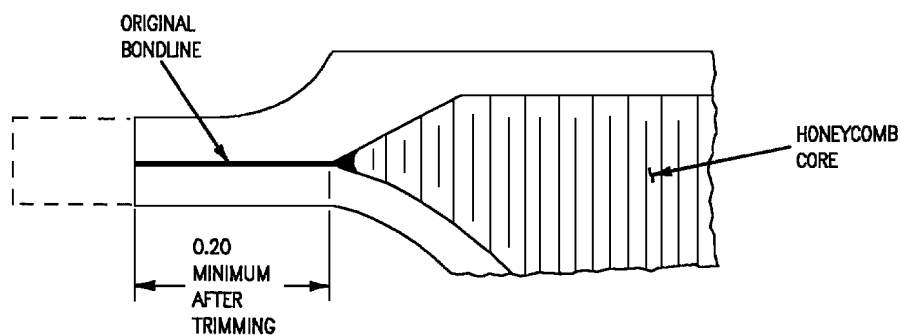
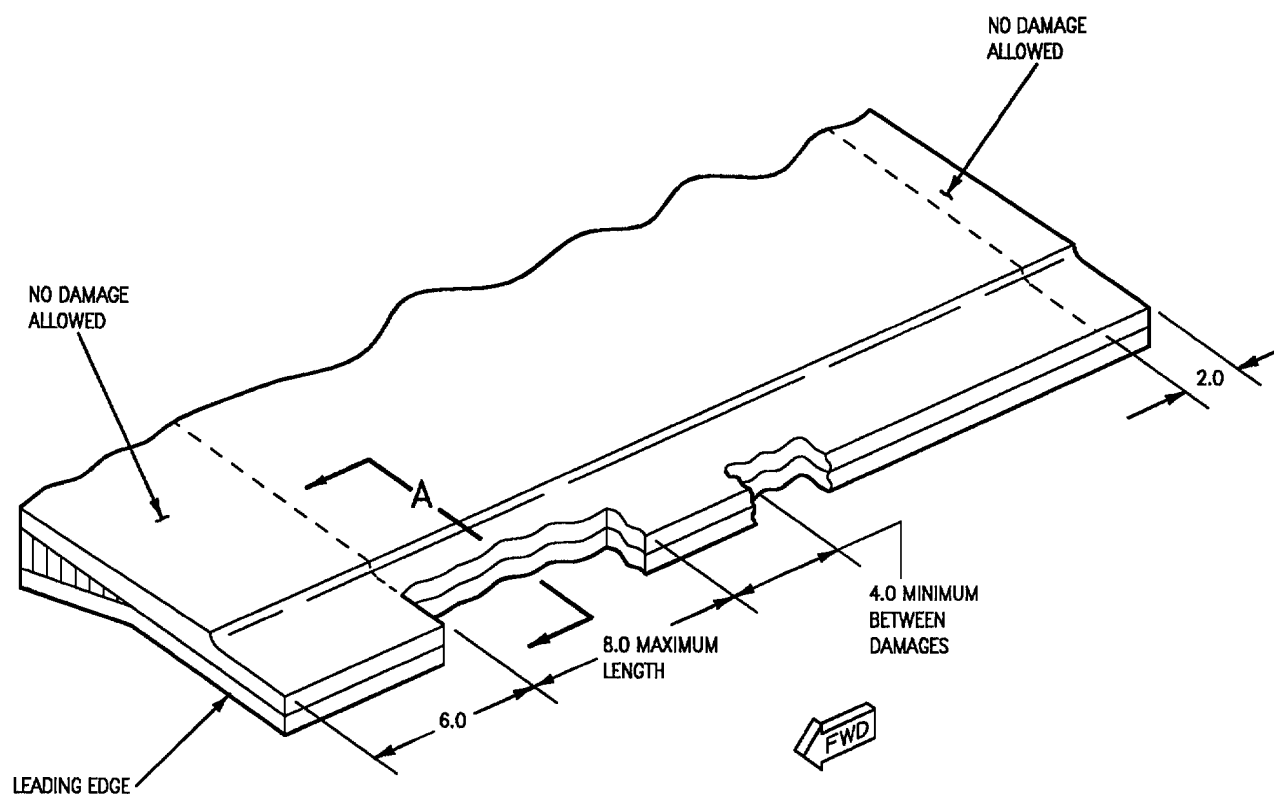


Figure 8. Door Edge Gap Repair



DAMAGE LIMITS

LEGEND

- 1 TRIM DIMENSION FOR RECESS EDGE, TYPICAL
- 2 REMAINING THICKNESS AFTER TRIM DIMENSION, TYPICAL
- 3 STEP DEPTH, ONE-HALF OF REMAINING THICKNESS, TYPICAL

Figure 9. Inboard Edge Repair (Sheet 1)

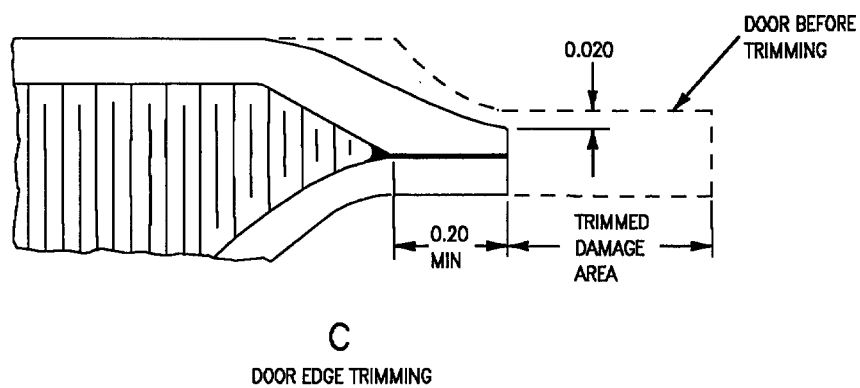
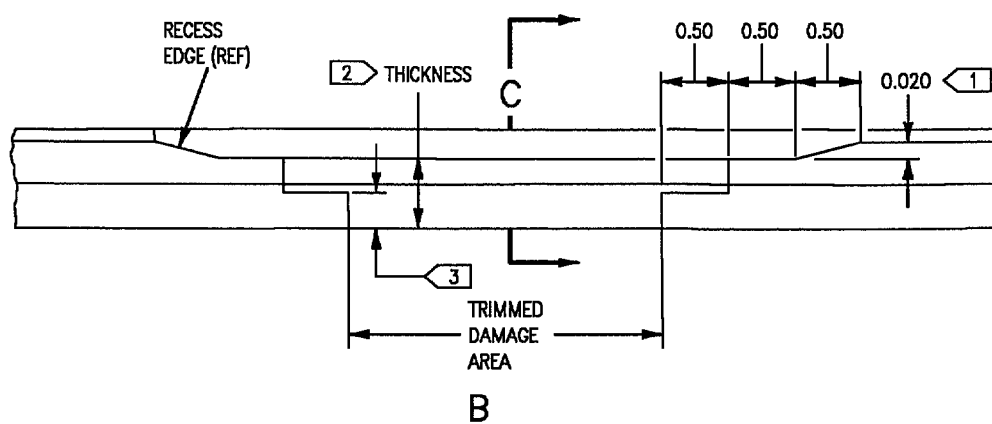
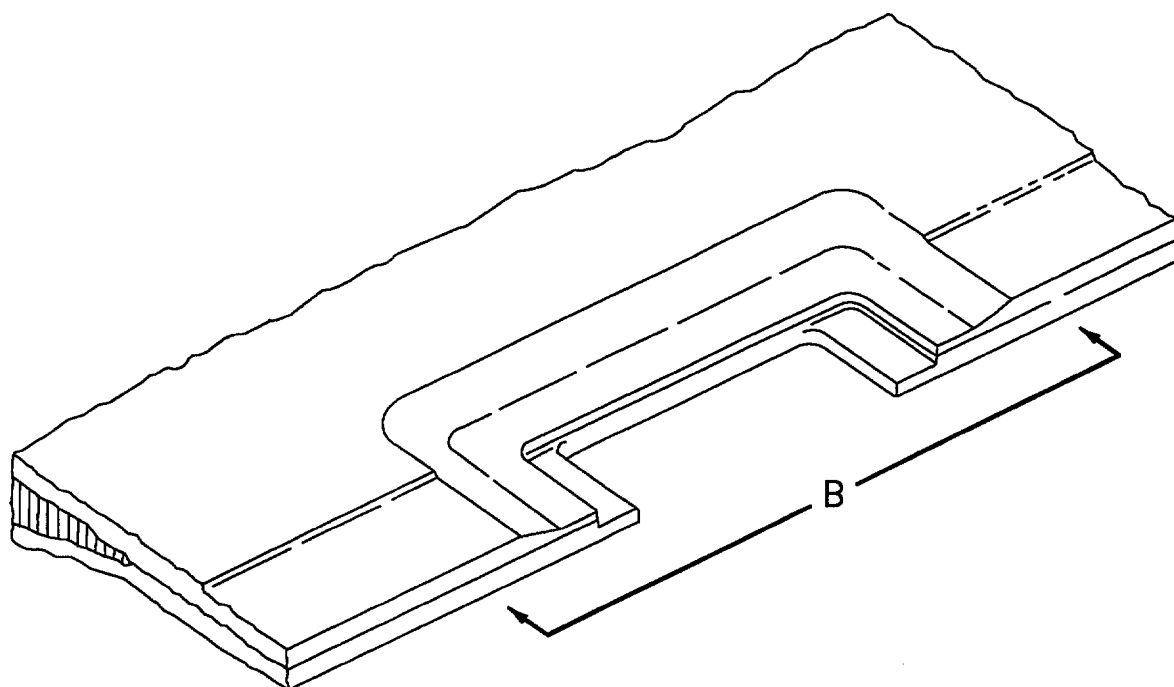
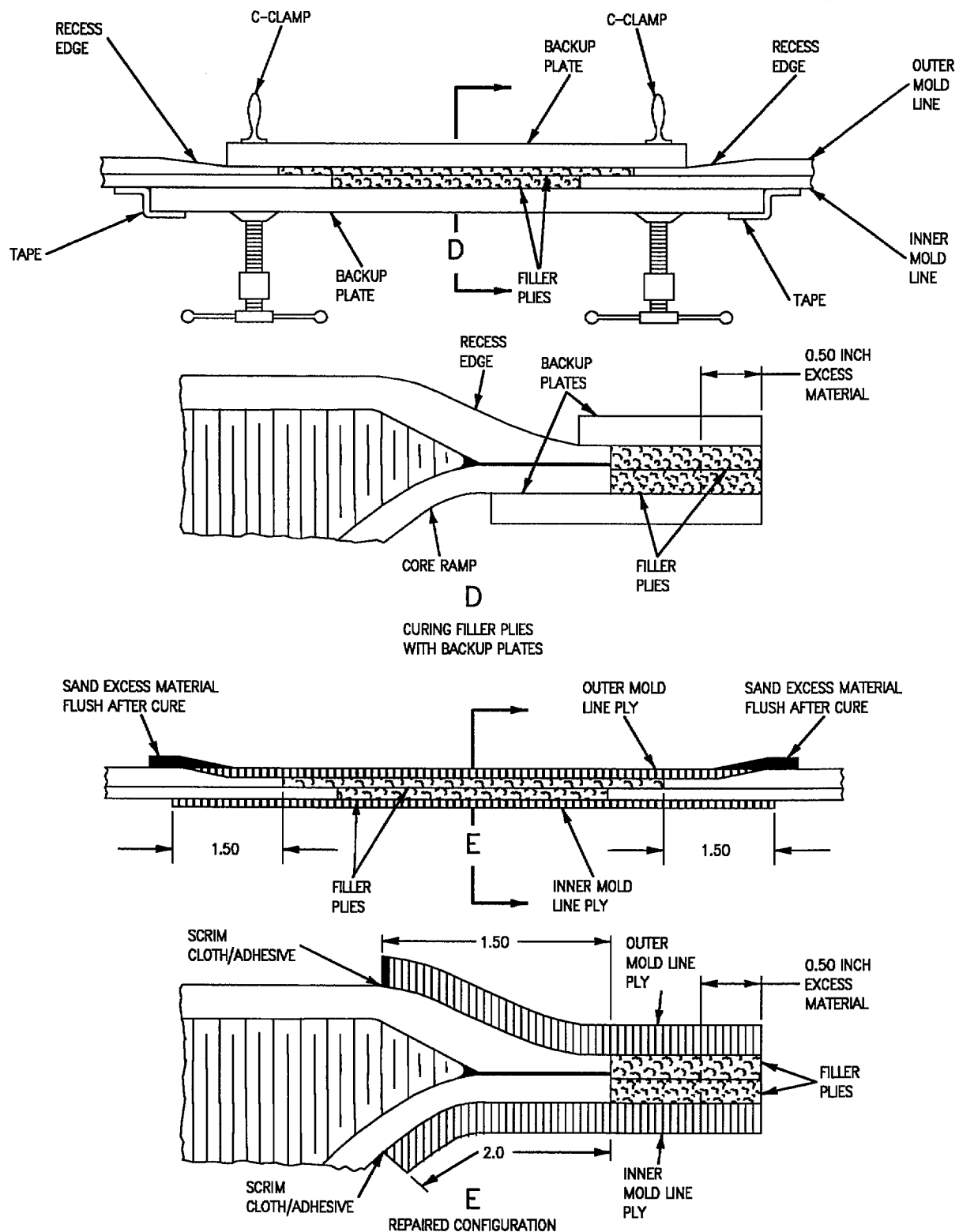


Figure 9. Inboard Edge Repair (Sheet 2)



03300903

Figure 9. Inboard Edge Repair (Sheet 3)

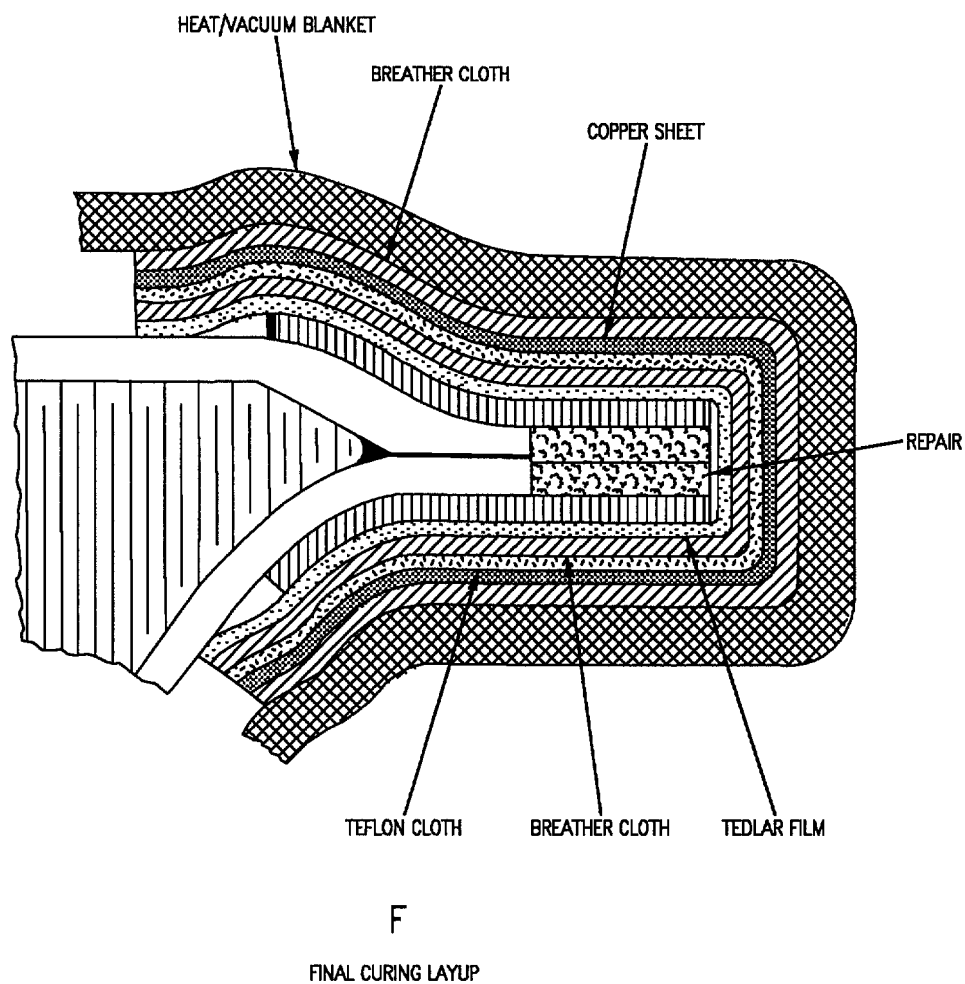
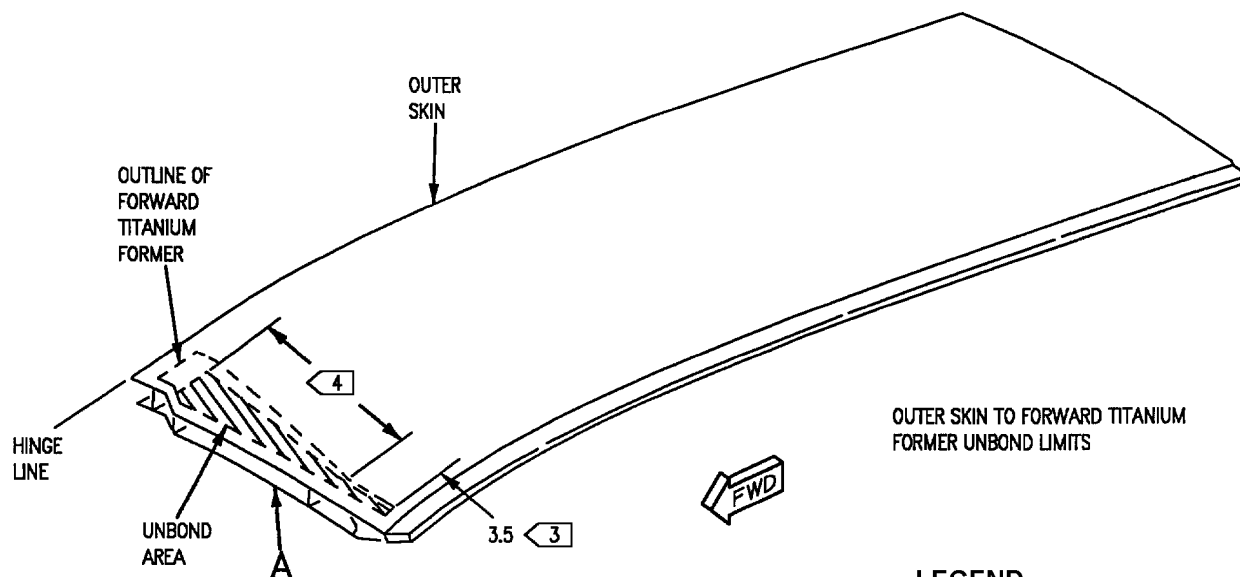


Figure 9. Inboard Edge Repair (Sheet 4)



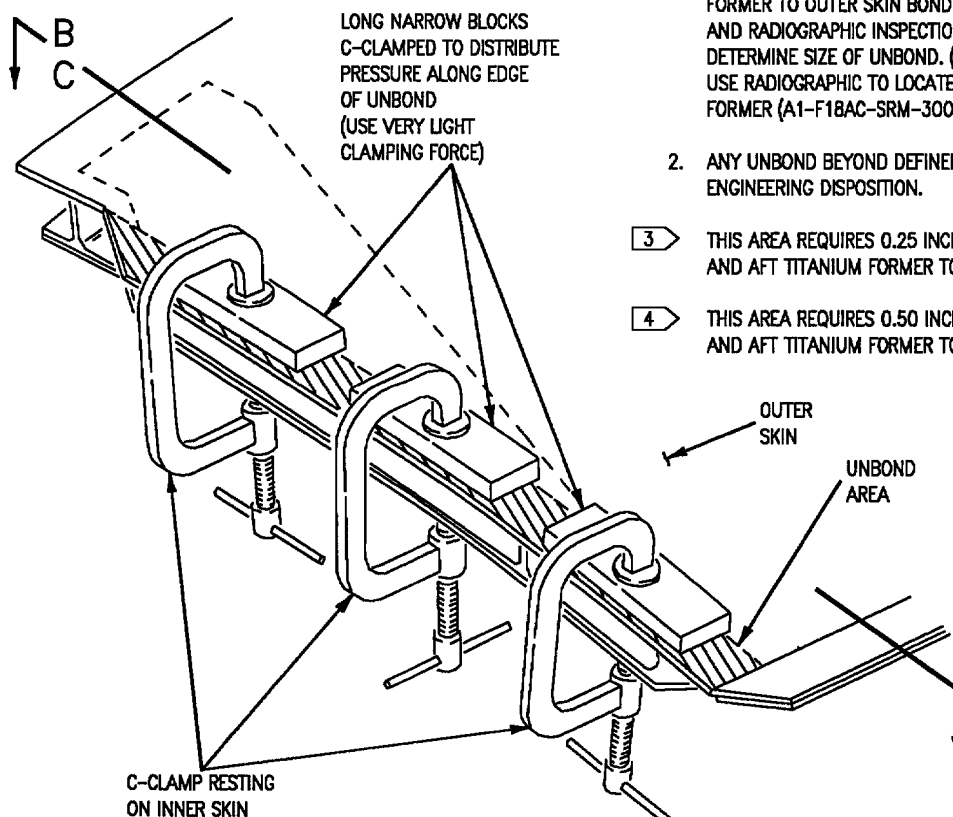
LEGEND

1. DETERMINE WIDTH OF UNDAMAGED FORWARD AND AFT TITANIUM FORMER TO OUTER SKIN BONDLINE BY DOING ULTRASONIC AND RADIOGRAPHIC INSPECTIONS. USE ULTRASONIC TO DETERMINE SIZE OF UNBOND. (A1-F18AC-SRM-300, WP076 01). USE RADIOGRAPHIC TO LOCATE AFT EDGE OF FORWARD TITANIUM FORMER (A1-F18AC-SRM-300, WP076 00).

2. ANY UNBOND BEYOND DEFINED LIMITS REQUIRES DEPOT ENGINEERING DISPOSITION.

3 THIS AREA REQUIRES 0.25 INCH OF UNDAMAGED FORWARD AND AFT TITANIUM FORMER TO OUTER SKIN BONDLINE.

4 THIS AREA REQUIRES 0.50 INCH OF UNDAMAGED FORWARD AND AFT TITANIUM FORMER TO OUTER SKIN BONDLINE.



A

CLAMPING UNBOND TO
PREVENT MORE DAMAGE

Figure 10. Main Landing Gear Outboard Door Leading Edge Outer Skin Repair (Sheet 1)

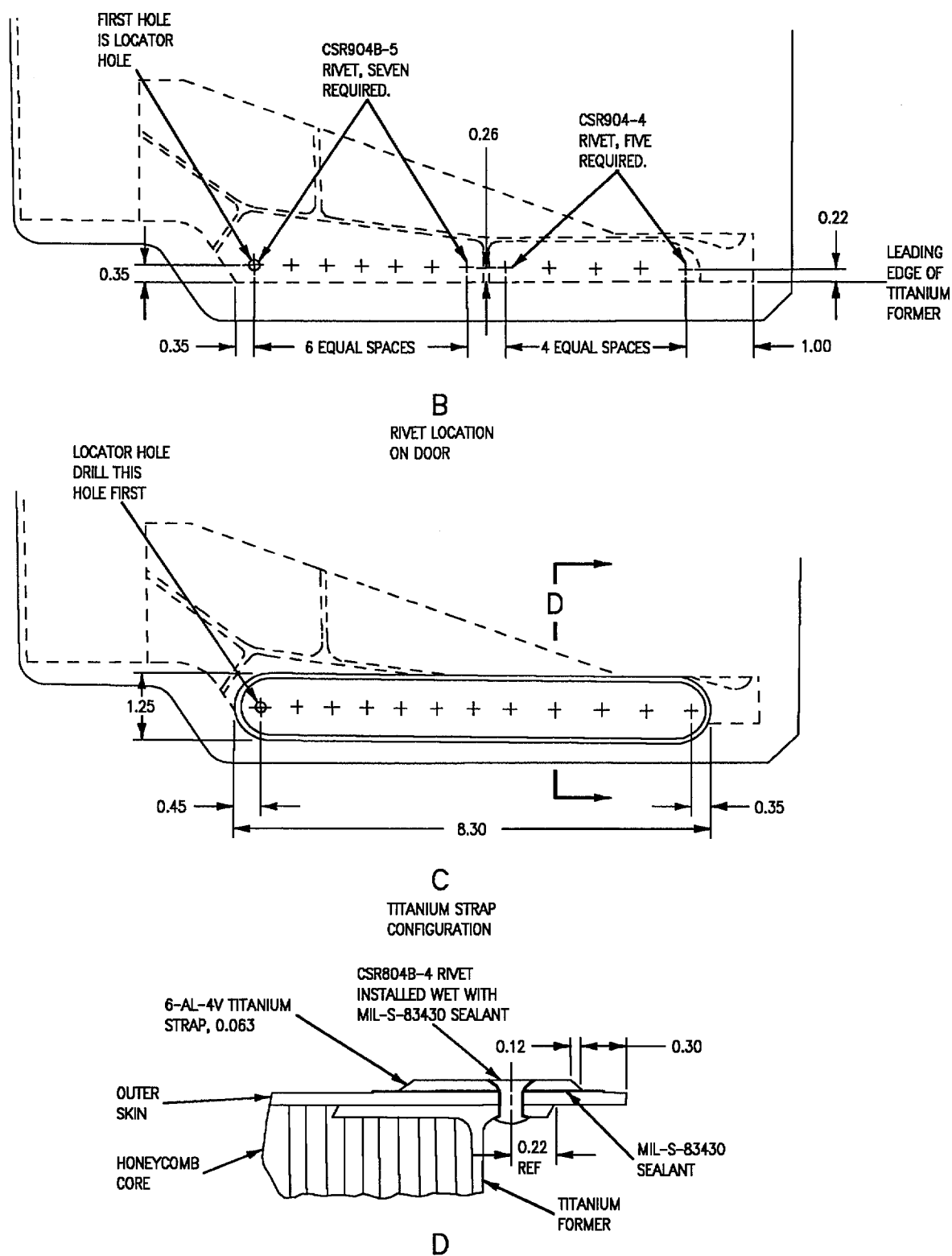


Figure 10. Main Landing Gear Outboard Door Leading Edge Outer Skin Repair (Sheet 2)

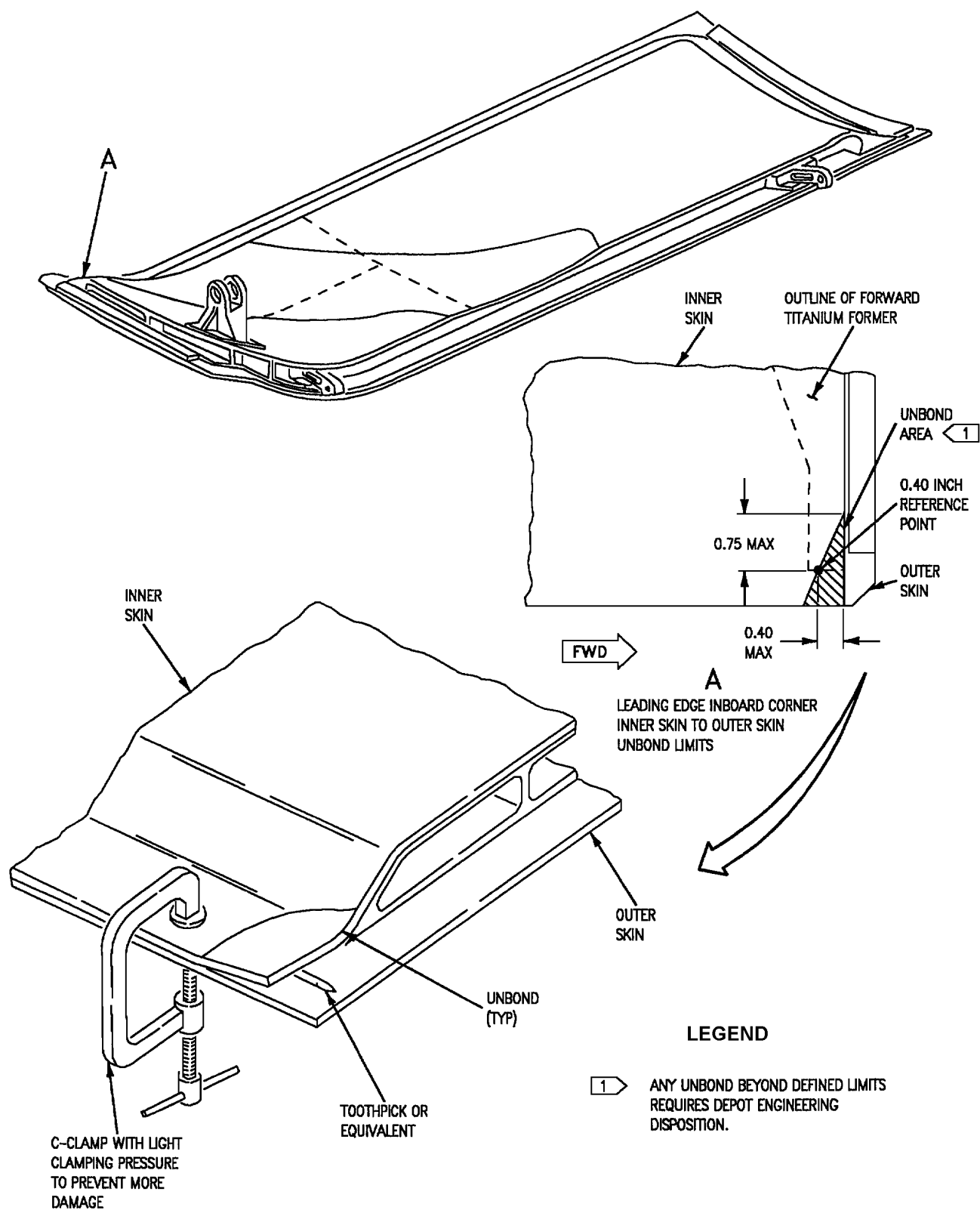


Figure 11. Main Landing Gear Outboard Door Leading Edge Inboard Corner Repair (Sheet 1)

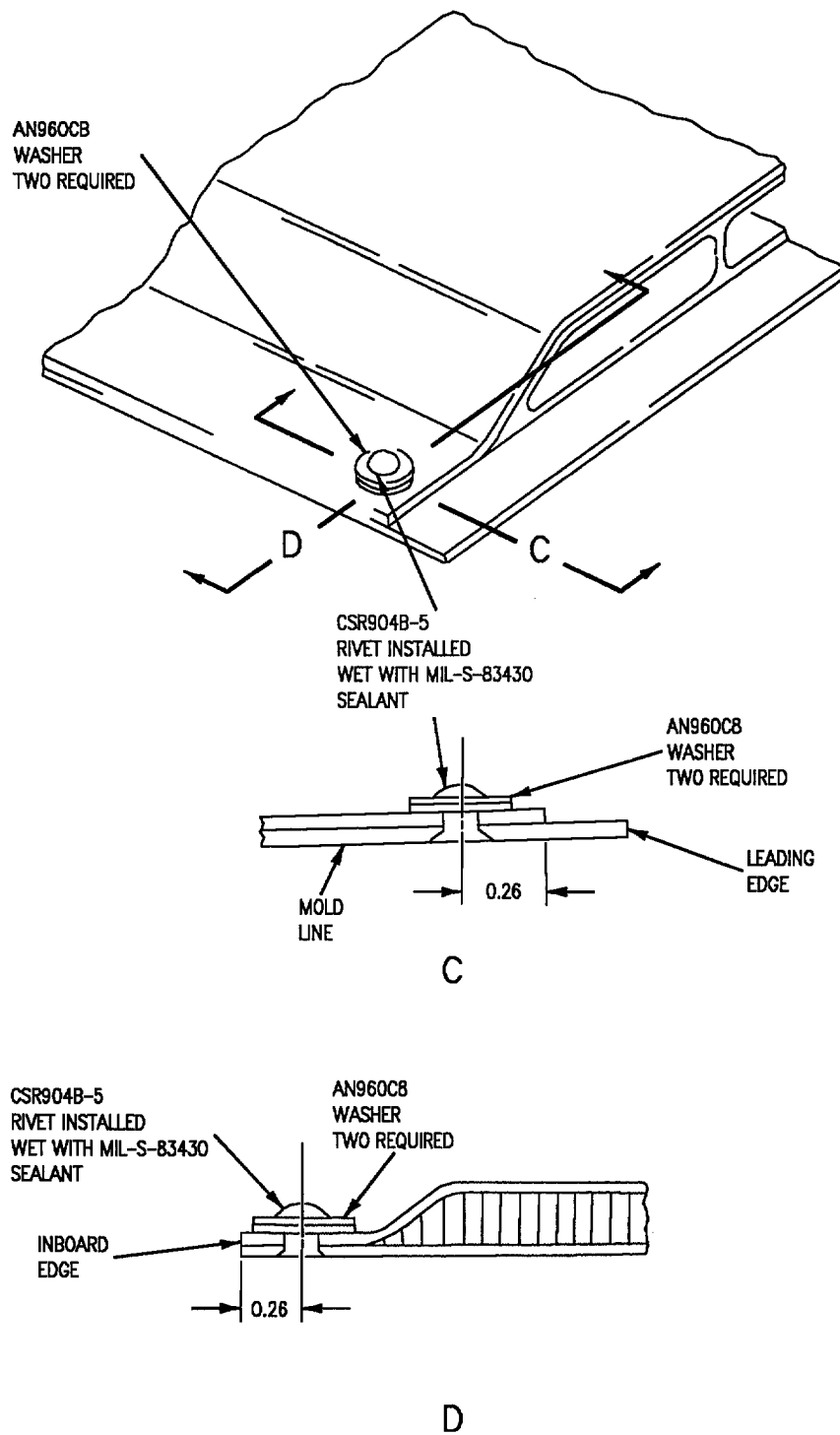


Figure 11. Main Landing Gear Outboard Door Leading Edge Inboard Corner Repair (Sheet 2)

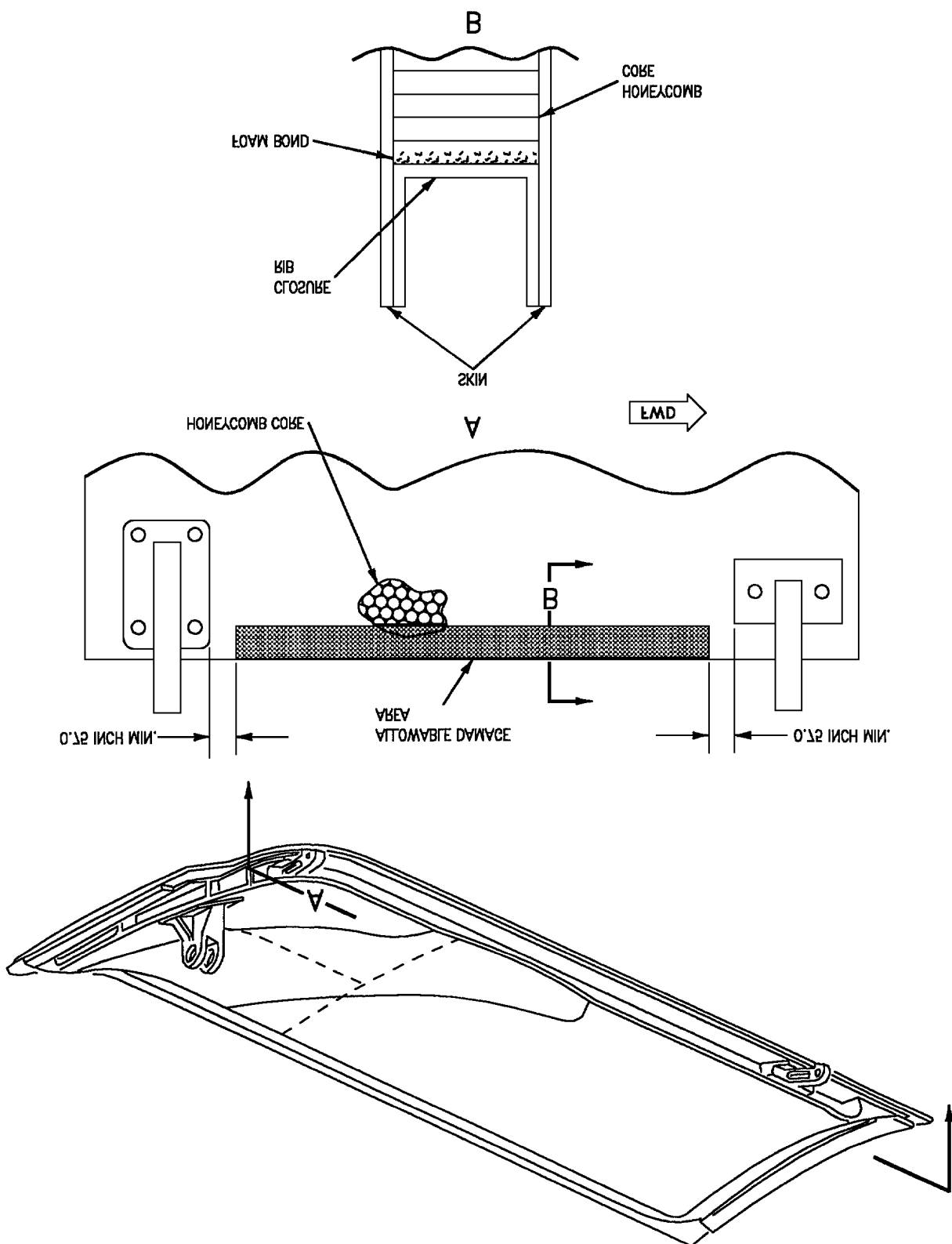


Figure 12. Outboard Edge Repair

ORGANIZATIONAL AND DEPOT MAINTENANCE
STRUCTURE REPAIR
CENTER FUSELAGE INTERNAL ACCESS COVERS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Form In Place Sealing	WP010 00
Aft Center Fuselage Finish System and Markings	WP033 00
Structure Illustrated Parts Breakdown - Center Fuselage	A1-F18AC-SRM-430
Fuselage Section - Center, Assy of	FIG 003 00
Structure Assy - Ctr Fus Section, Y453.000 to Y488.000	FIG 015 00
Structure - Keel - Fus Ctr Sect, Y488.000 - Y557.500, Assy of	FIG 014 00
Structure Repair, General Information	A1-F18AC-SRM-200
Introduction	WP002 00
Gang Channel Identification and Repairs	WP004 05
Fasteners	WP004 06
Oversize Fasteners	WP004 07
Cold Working Fastener Holes	WP004 10
Structure Repair, Typical Repair	A1-F18AC-SRM-250
Aluminum Sheet, Free of Structure and Land Areas	WP031 00
Titanium Sheet, Free of Structure and Land Areas	WP032 00
Aluminum Sheet Edge Repairs	WP034 00
Titanium Sheet Edge Repairs	WP035 00
Aluminum Sheet Repairs Across Structure and Lands	WP036 00
Titanium Sheet Repairs Across Structure and Lands	WP037 00
Blending	WP038 00
Aircraft Weapons Systems Cleaning and Corrosion Control	NAVAIR 01-1A-509
Structural Hardware	NAVAIR 01-1A-8

Alphabetical Index

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Negligible Damage	2
Repairable Damage	2
Repairs	3
Permanent Repairs	3
Cracks	3
Dents	4
Edge	4

Alphabetical Index (Continued)

Subject	Page No.
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Scratches, Nicks, Gouges, or Corrosion	3
Replacements	6
Cover (Door FBA)	6
Cover (Door FBB)	6
Cover (Door FBC)	6
Cover (Door MWA)	6

Record of Applicable Technical Directives

None

1. **DAMAGE EVALUATION.** See figures 1 and 2.

2. Damage is classified as negligible and repairable. Types of materials used are shown on figure 1. Repair zones are shown on figure 2. Allowable damage limits within repair zones are listed in tables 1 and 2. Repair to aluminum or titanium sheet across structure or land areas, 0.063 inch material or thicker, in zone B2 is depot maintenance. Damage not listed or exceeding limits below requires depot engineering disposition.

3. **NEGLIGIBLE DAMAGE.** Negligible damage is damage that may be allowed to exist as is. However, preventive maintenance, for temporary corrosion arrestment, should be done to scratches (NAVAIR 01-1A-509). Types and limits of damage are listed below and in table 1. Figure and index numbers in table 1 coincide with figure and index numbers in material index.

a. Scratches are not allowed within one diameter from edge of any hole.

b. Smooth dents only, effective diameter at least 20 times depth.

4. **REPAIRABLE DAMAGE.** Types and limits of damage are listed below and in table 2. Figure and index numbers in table 2 coincide with figure and index numbers in material index.

NOTE

Limits in table 2 apply after blending damage.

a. Scratches.

(1) Any scratches within one diameter of any hole must be blended out. Minimum blend out is on diameter from edge of any hole.

(2) Scratches to be blended out with diameter, or width, at surface at least 20 times depth.

b. Nicks, gouges, and corrosion to be blended out with diameter, or width, at surface at least 20 times depth.

c. Cracks. All cracks must be repaired.

d. Holes.

(1) Damage in areas free of structure and lands must have edge of cleanup hole at least eight repair fastener diameters from any land, integral structure, or existing row of fasteners.

(2) Damage to lands over structure, only one repair per land.

e. Dents exceeding limits in table 1 must be repaired.

5. REPAIRS.

6. Types of repairs are temporary, one-time flight, permanent, critical areas, alternate, and typical. Repair type definitions are in structure repair terms (A1-F18AC-SRM-200, WP002 00).

7. PERMANENT REPAIRS.

8. Scratches, Nicks, Gouges, or Corrosion. Blend scratches, nicks, gouges, or corrosion (A1-F18AC-SRM-250, WP038 00). If, after blending, damage limits of table 2 are exceeded, repair aluminum sheet or titanium sheet as below. Refinish blended areas (NAVAIR 01-1A-509).

a. Scratches - make crack or edge repair.

b. Nicks, gouges, or corrosion - make hole or edge repair.

9. Cracks.

a. In repair zones A2 and B2, repair cracks free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Stop drill ends of cracks in zone A2. Completely cut out cracks in smallest diameter circle possible in zone B2.

(2) In zone A2, install lap patch for cracks.

(3) In zone B2, install type two flush or lap patch.

(4) Refinish repaired area A1-F18AC-SRM-500, WP033 00).

b. In repair zones A2 and B2, repair cracks across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below.

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In zones A2 and B2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Land; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

10. Holes.

a. In repair zones A2 and B2, repair holes free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Cut out damage.

(2) In zone A2, install type one flush or lap patch. In zone B2 install type two flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zones A2 and B2, repair holes across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In zones A2 or B2, make repairs as below:

(a) Damage to Bay Requiring Repair Across Land; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge or Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

11. **Edge.** In repair zones A2 and B2, repair edge damage in aluminum sheet (A1-F18AC-SRM-250, WP034 00) or in titanium sheet (A1-F18AC-SRM-250, WP035 00) as below:

a. Cut out damage.

b. Select repair patch.

(1) Corner Damage to lands.

(2) Corner Damage to Lands and Bays.

(3) Edge Damage to Lands.

(4) Edge Damage to Lands and Bays.

(5) Full Width Damage to End.

c. Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

12. Dents.

a. In repair zones A2 and B2, repair dents free of structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP031 00) or in titanium sheet (A1-F18AC-SRM-250, WP032 00) as below:

(1) Cut out damage.

(2) In zone A2, install type one flush or lap patch. In zone B2, install type two flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

b. In repair zones A2 and B2, repair dents across structure or land areas in aluminum sheet (A1-F18AC-SRM-250, WP036 00) or in titanium sheet (A1-F18AC-SRM-250, WP037 00) as below:

(1) Cut out damage.

NOTE

When making repair in zone B2, to 0.063 inch or thicker material, all fastener holes shall either be cold worked (A1-F18AC-SRM-200, WP004 10) or drilled to interference fit (A1-F18AC-SRM-200, WP004 06) for standard fasteners or (WP004 07) for oversize fasteners. Cold working or drilling interference fit holes is depot maintenance.

(2) In zone A2 or B2 make repairs as below:

(a) Damage to Bay Requiring Repair Across Land; install flush or lap patch.

(b) Damage to Bay Requiring Repair Across Land and Edge of Part; install flush or lap patch.

(c) Damage to Land or Land and Bay; install flush or lap patch.

(3) Refinish repaired area (A1-F18AC-SRM-500, WP033 00).

Table 1. Negligible Damage Limits

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Dents Depth	Rivet Tilt
				Depth	Area		
Fig 1 (1)	Cover (Door FBB) Zone B2 Zone B2	0.050	0.0006	0.0006	100%	0.025	NA
		0.125	0.0006	0.0006	100%	0.063	NA
Fig 1 (2)	Cover (Door FBA) Zone A2	0.040	0.005	0.002	100%	0.020	NA
Fig 1 (3)	Cover (Door FBC) Zone A2 Zone A2	0.027	0.003	0.002	100%	0.014	NA
		0.040	0.005	0.002	100%	0.020	NA
Fig 1 (4)	Cover (Door MWA) Zone A2 Zone A2	0.030	0.004	0.002	100%	0.015	NA
		0.071	0.009	0.002	100%	0.036	NA

Table 2. Repairable Damage Limits After Blending

Fig No Idx No	Nomen/ Repair Zone	Thickness	Scratch Depth	Nicks Gouges		Corrosion	
				Depth	Area	Depth	Area
Fig 1 (1)	Cover (DoorFBB) Zone B2 Zone B2	0.050	0.010	0.010	20%	0.010	20%
		0.125	0.025	0.025	20%	0.025	20%
Fig 1 (2)	Cover (Door FBA) Zone A2	0.040	0.008	0.008	40%	0.008	40%
Fig 1 (3)	Cover (Door FBC) Zone A2 Zone A2	0.027	0.005	0.005	50%	0.005	50%
		0.040	0.008	0.008	50%	0.008	50%
Fig 1 (4)	Cover (Door MWA) Zone A2 Zone A2	0.030	0.006	0.006	40%	0.006	40%
		0.071	0.014	0.014	40%	0.014	40%

13. REPLACEMENTS.

14. Fastener attaching hardware is shown for covers below:

a. Cover, door FBA, is interchangeable. Fastener attaching hardware is shown on figure 3. For fasteners (A1-F18AC-SRM-430, FIG 015 00). For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05).

b. Cover, door FBB, is interchangeable. Fastener attaching hardware is shown on figure 4. For fasteners (A1-F18AC-SRM-430, FIG 003 00).

For replacement rivets attaching plate nuts (A1-F18AC-SRM-200, WP004 05).

c. Cover, door FBC, is interchangeable. Fastener attaching hardware is shown on figure 5. For fasteners (A1-F18AC-SRM-430, FIG 015 00). For replacement rivets attaching plate nuts, not shown (A1-F18AC-SRM-200, WP004 05).

d. Cover, door MWA, is interchangeable. Fastener attaching hardware is shown on figure 6. For flare lock fasteners (A1-F18AC-SRM-430, FIG 014 00). Replace receptacles and flare lock fasteners (Milsen panel fasteners) (NAVAIR 01-1A-8). For form in place sealing (A1-F18AC-SRM-500, WP010 00).

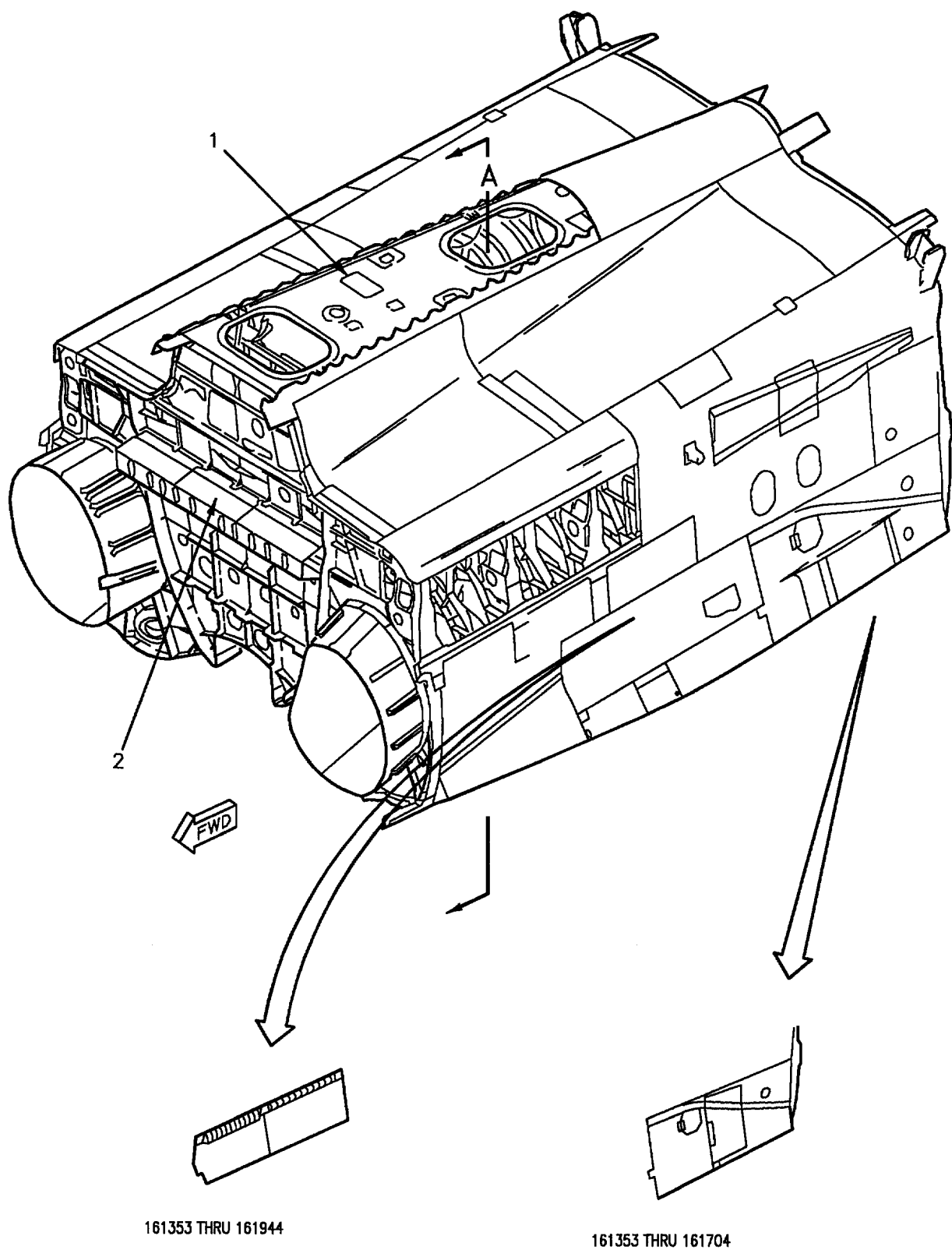


Figure 1. Material Index (Sheet 1)

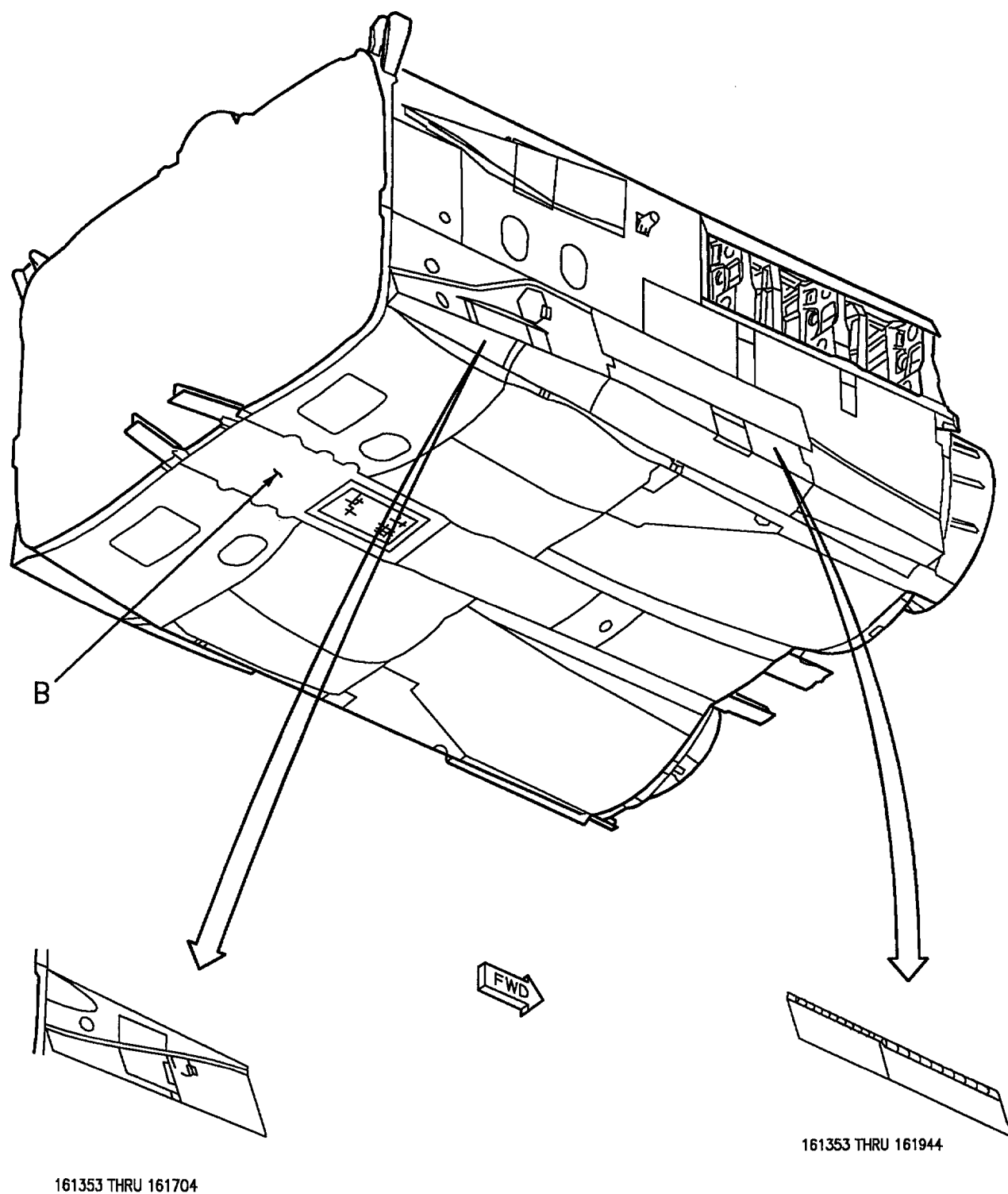


Figure 1. Material Index (Sheet 2)

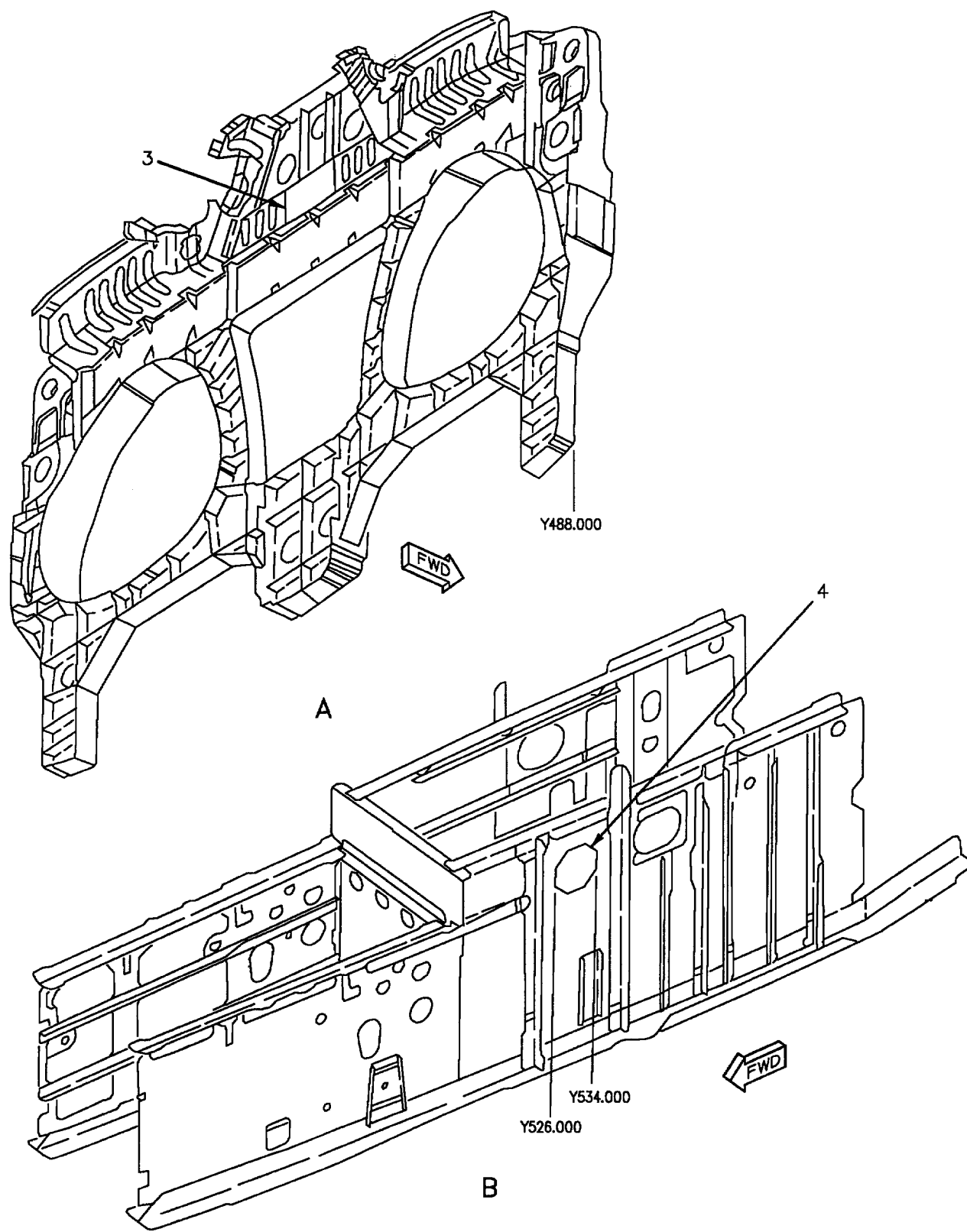


Figure 1. Material Index (Sheet 3)







Idx No.	Eft	Nomenclature and Part No.	Description	Material
1		Cover (Door FBB) 74A324614-2001	 Sheet	7076-T76 Al Aly
2		Cover (Door FBA) 74A321020-2029	0.040 Sheet	7076-T6 Al Aly
3		Cover (Door FBC) 74A324205-2045	 Sheet	7075-T6 Al Aly
4		Cover (Door MWA) 74A324684-2003	 Sheet	6Al-4V Ti Anl
<p style="text-align: center;">LEGEND</p> <p> Land is 0.125 and bay is 0.050.</p> <p> Land is 0.040 and bay is 0.027.</p> <p> Land is 0.071 and bay is 0.030.</p>				

Figure 1. Material Index (Sheet 4)

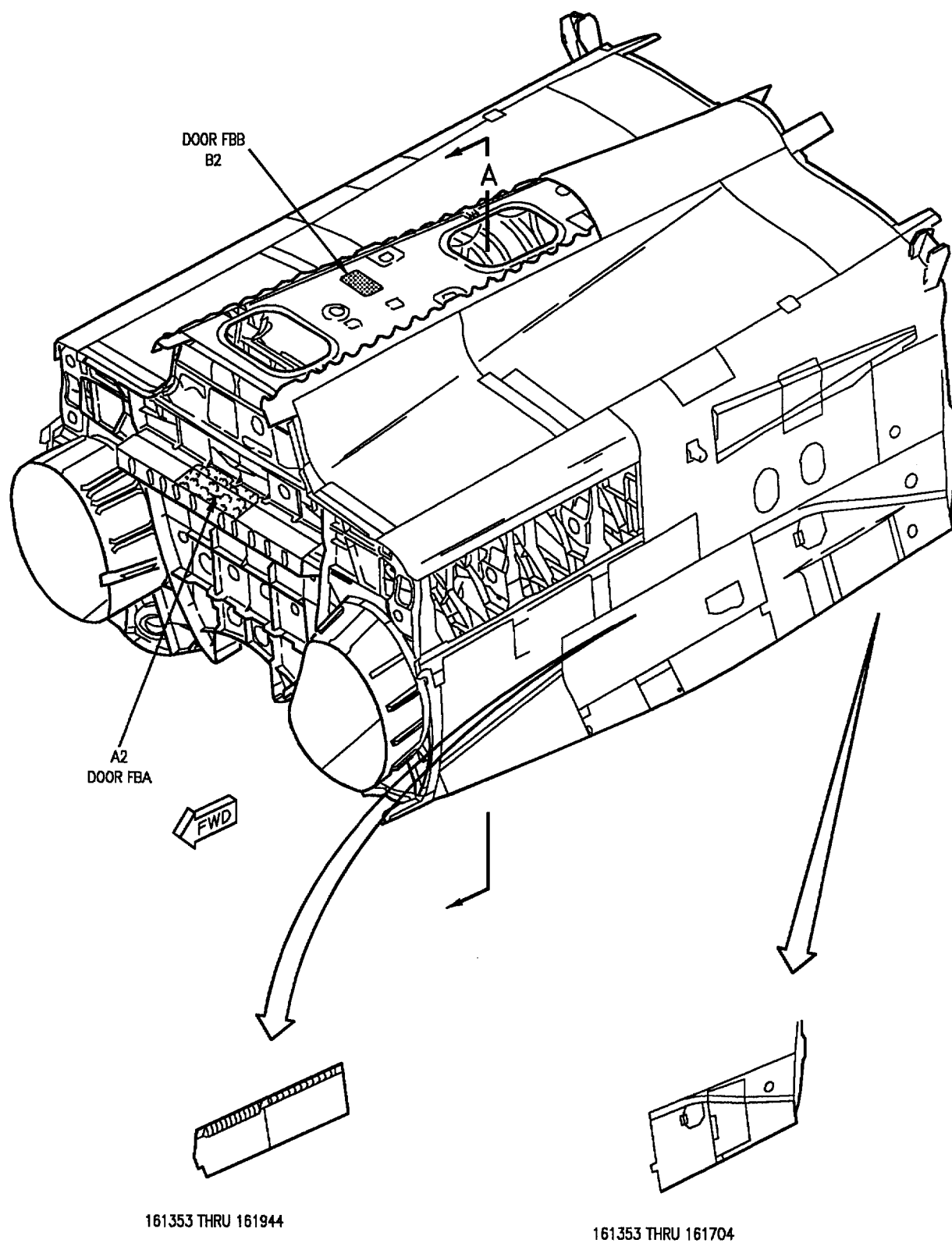


Figure 2. Repair Zones (Sheet 1)

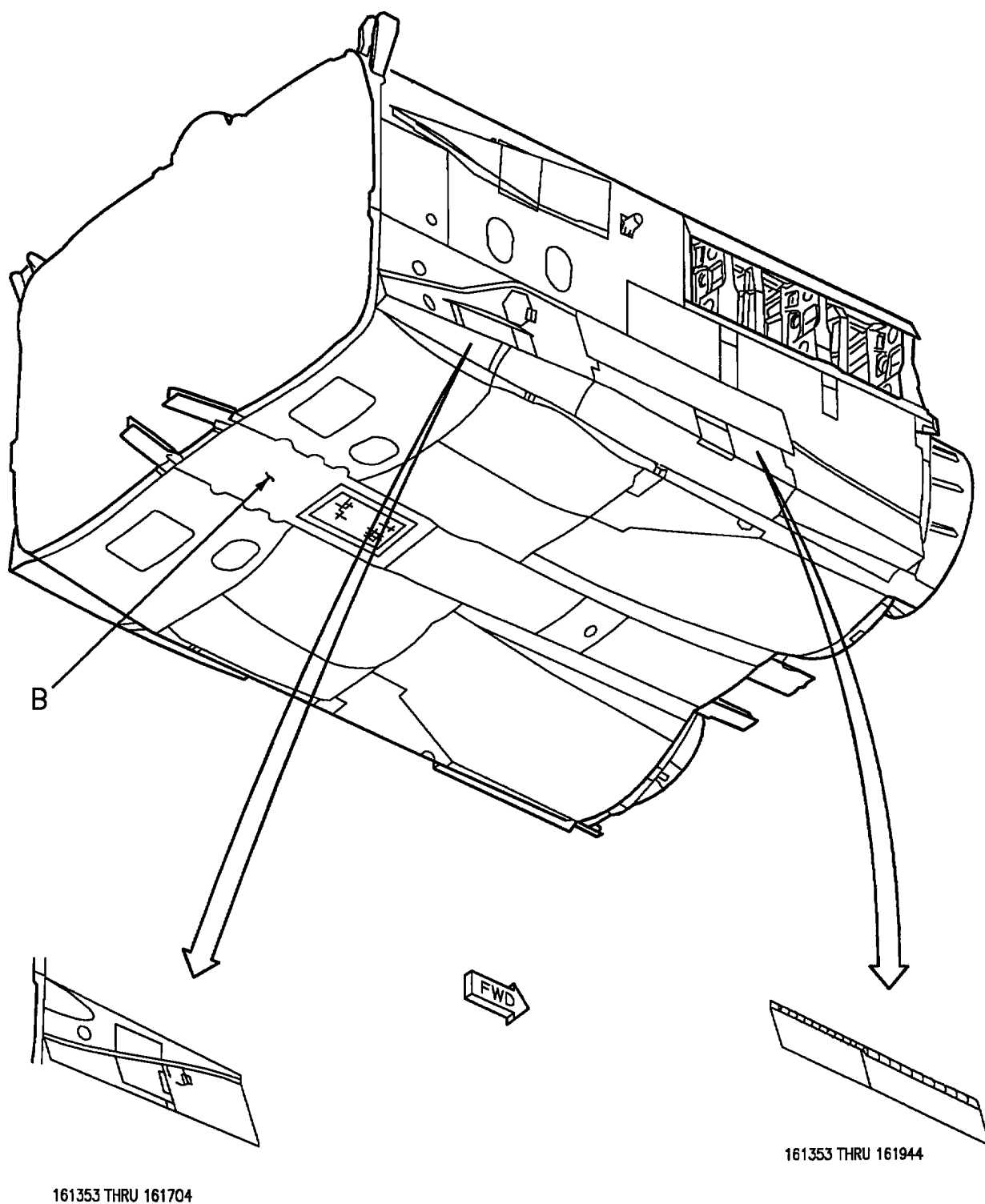


Figure 2. Repair Zones (Sheet 2)

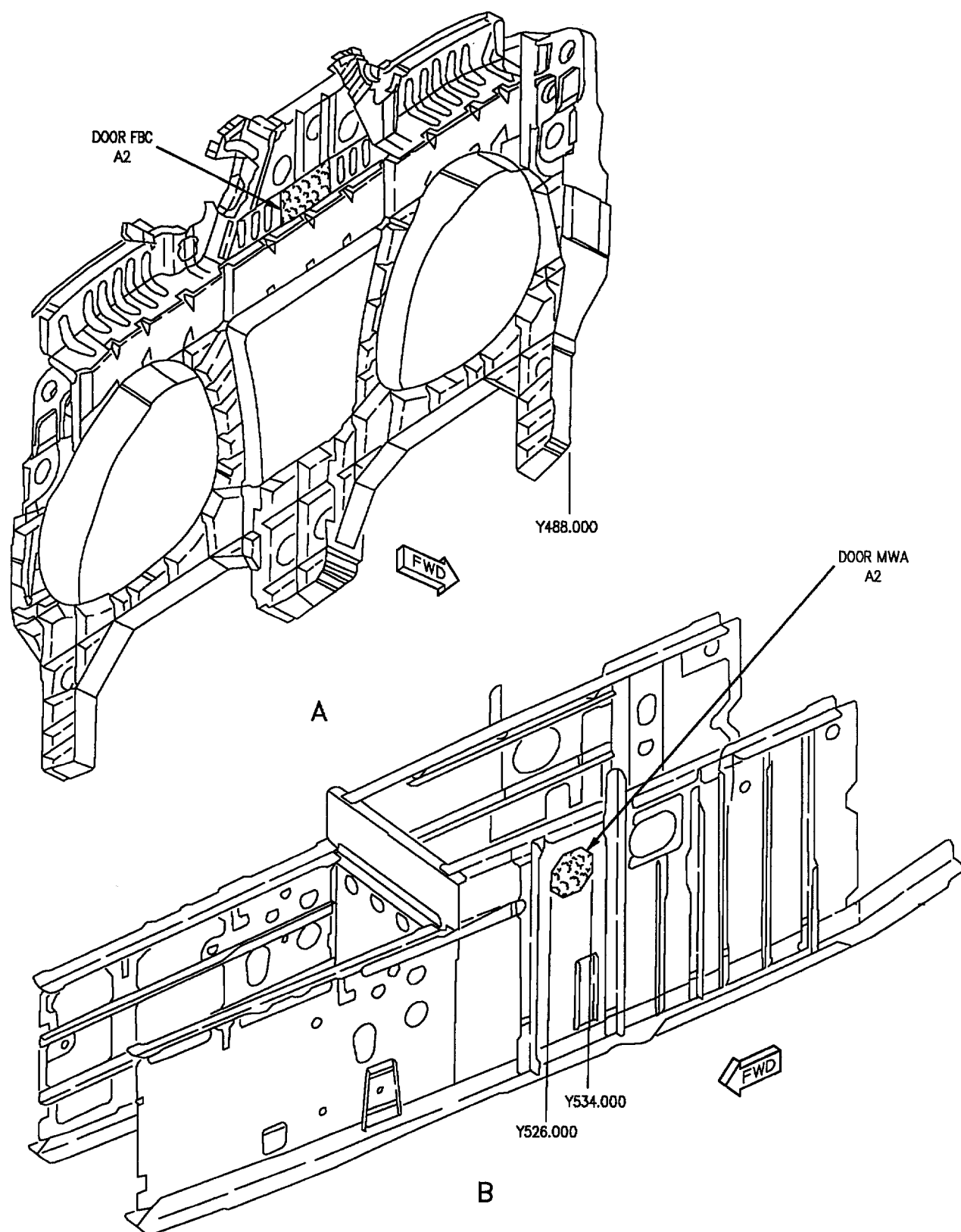


Figure 2. Repair Zones (Sheet 3)

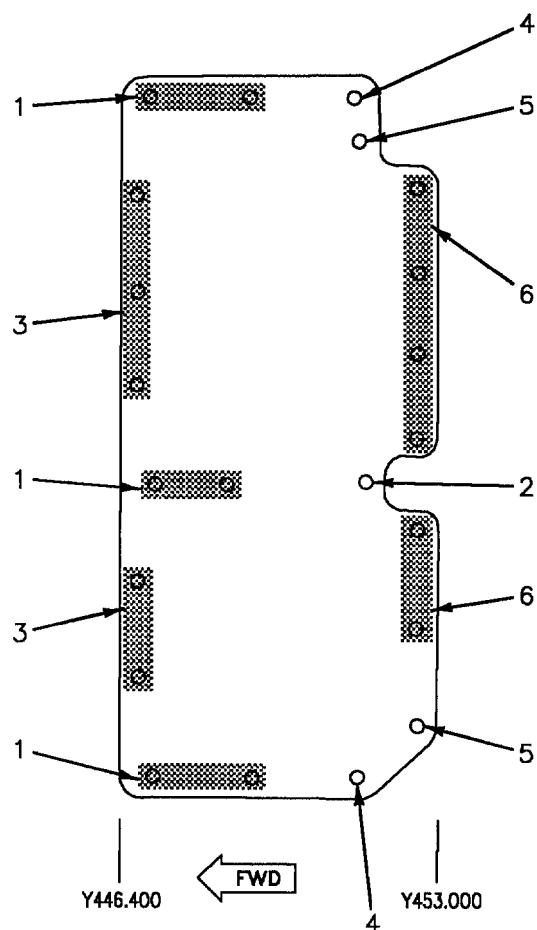


Figure 3. Cover (Door FBA) Replacement (Sheet 1)








Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F49249E3-4
2			Plate Nut	F49251E3-4
3			Plate Nut	F49249E3-6
4			Plate Nut	F49249E3-1
5			Plate Nut	F49249E3-2
6			Plate Nut	F49249E3-3
LEGEND				
 Hole diameter is 0.191 +0.006 -0.000.				

Figure 3. Cover (Door FBA) Replacement (Sheet 2)

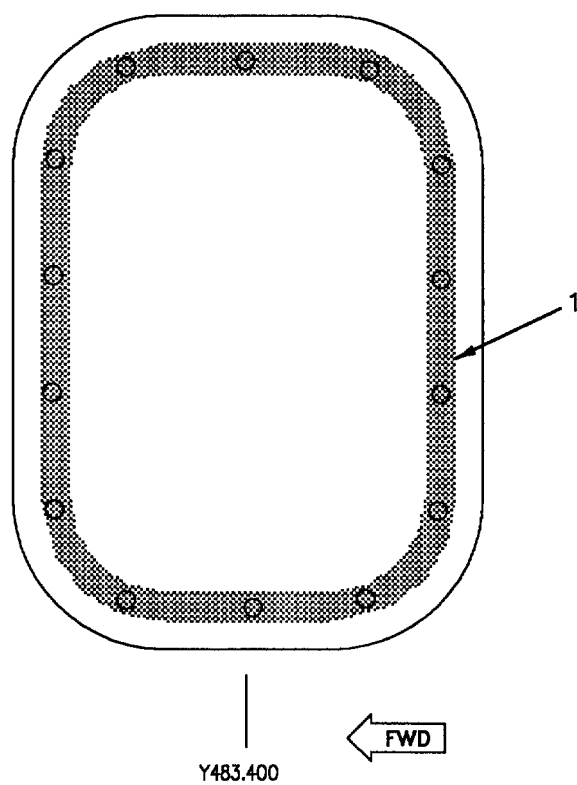


Figure 4. Cover (Door FBB) Replacement (Sheet 1)



Idx No.	Eft		Nomenclature	Part Number
1			Plate Nut	F50406-4
LEGEND				
 Hole diameter is 0.250 +0.006 -0.000.				

Figure 4. Cover (Door FBB) Replacement (Sheet 2)

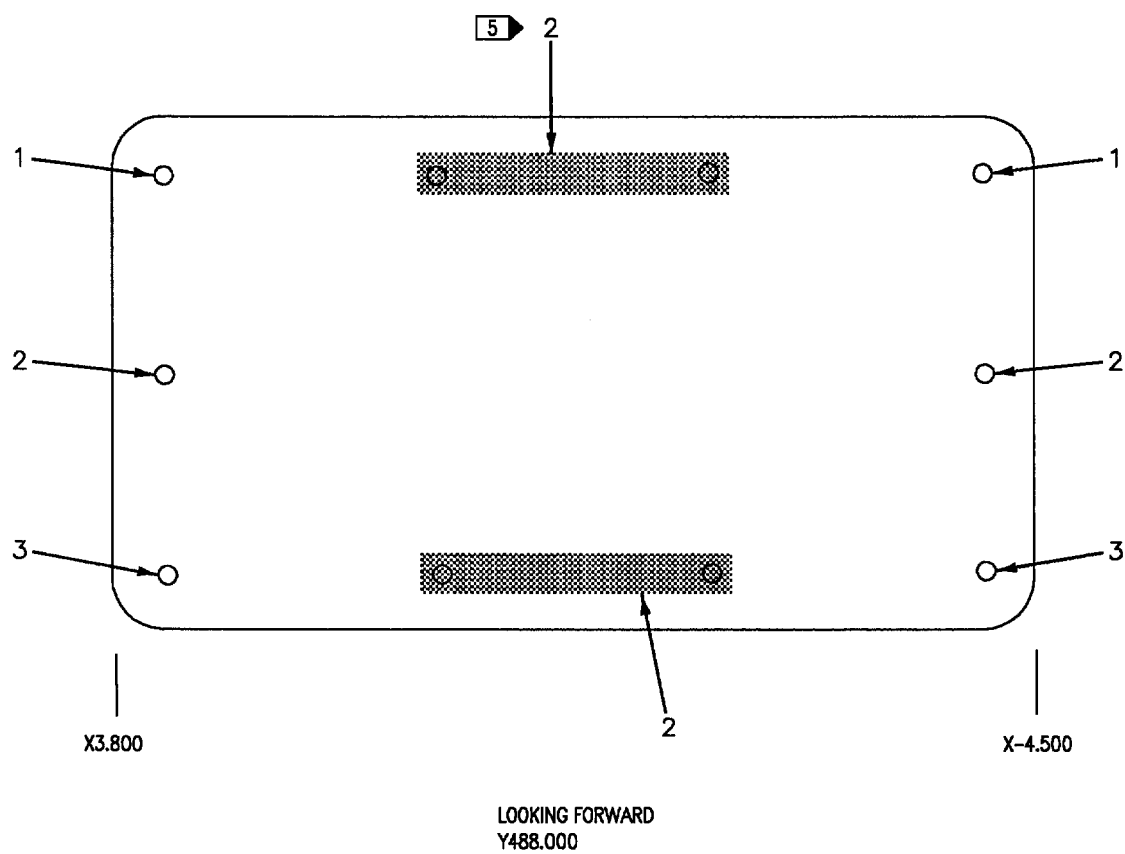


Figure 5. Cover (FBC) Replacement (Sheet 1)











Idx No.	Eft		Nomenclature	Part Number
1			 Plate Nut Plate Nut	F49249E3-1 F29339-01-3
2			Plate Nut	F49249E3-1
3			Plate Nut	F29339-01-3
<p style="text-align: center;">LEGEND</p> <p> Hole diameter is 0.191 +0.006 -0.000.</p> <p> 161353 THRU 161704.</p> <p> 161705 AND UP.</p> <p> Attached with RV1241-3 rivet. Determine length on installation.</p> <p> Use RV1241-3 rivet to attach plate nut on 161353 THRU 161704. Determine length on installation.</p>				

Figure 5. Cover (Door FBC) Replacement (Sheet 2)

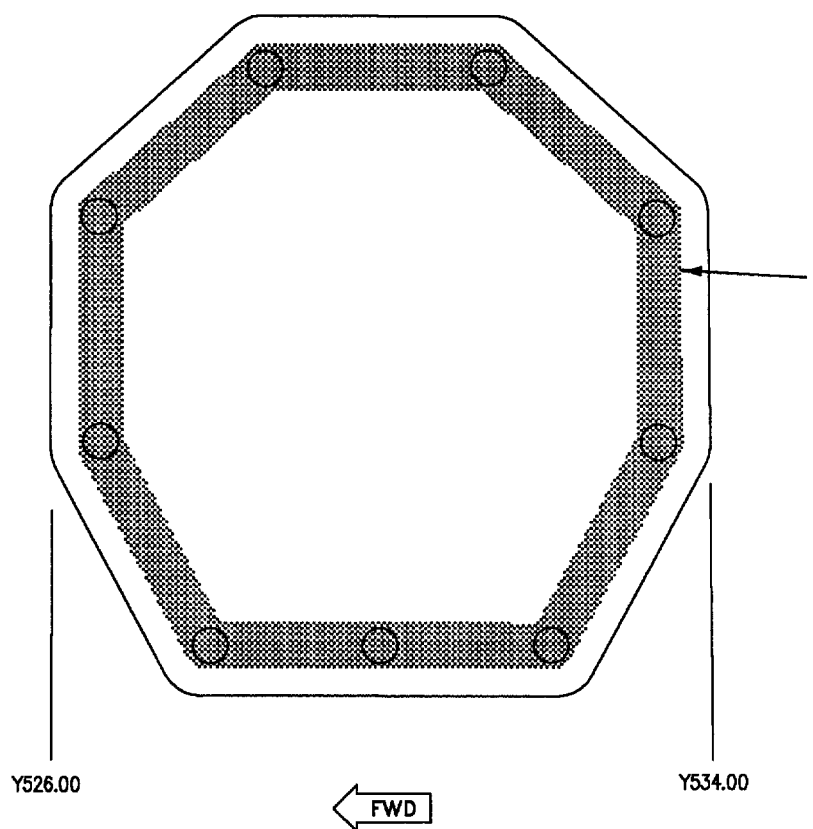


Figure 6. Cover (Door MWA) Replacement (Sheet 1)





Idx No.	Eft		Nomenclature	Part Number
1			 Receptacle	195012-5-8-01
LEGEND				
 Hole diameter is 0.315 +0.005 -0.000.				
 Attach with CSR902B-3 rivet. Determine length on installation.				

Figure 6. Cover (Door MWA) Replacement (Sheet 2)

ORGANIZATIONAL, INTERMEDIATE, AND DEPOT MAINTENANCE

STRUCTURE REPAIR

CENTER FUSELAGE SEALING REQUIREMENTS

Reference Material

Aircraft Corrosion Control	A1-F18AC-SRM-500
Fire and Thermal Barrier Coating	WP009 00
Fuel System	A1-F18AC-460-300
Fuel Tank Cavity Preparation	WP039 00
Line Maintenance Procedures	A1-F18AC-LMM-000
Structural Repair, General Information	A1-F18AC-SRM-200
Adhesive and Sealant Preparation and Application	WP011 00

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Foreign Object Containment Areas	2
Foreign Object Sealing	3
Sealing	2
Fire and Thermal Barrier Coating	2
Firewall Sealing	2
Fillet Sealing	2
Fuel Tank Sealing	2
Internal Fastener Sealing	2
Joggle Sealing	2
Tooling Hole Sealing	2

Record of Applicable Technical Directives

None

Support Equipment Required

None

Materials Required

None

1. SEALING.

2. This work package contains types of sealing required in center fuselage. Several application methods are used; internal fasteners, tooling holes, joggles, fillet, and fuel tank sealing. Fuselage fuel tank cavities are sealed to prevent both fuel and fumes from entering other compartments of aircraft. Some structural areas located between foam blocks and fuselage mold line skins are sealed for foreign object containment. Leaks between cavities are not permitted. Fuel is drained from cavities through drain lines. For exterior drain locations (A1-F18AC-LMM-000). Repairs to cavity or removal and replacement of a structural part shall be sealed.

3. **INTERNAL FASTENER SEALING.** Fasteners are sealed with MIL-S-83430 sealant. For sealing preparation and application (A1-F18AC-SRM-200, WP011 00).

4. **TOOLING HOLE SEALING.** Tooling holes are sealed with MIL-S-83430 sealant for prevention of foreign object damage. Drain holes and pathways must be clear of sealant. For sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

5. **JOGGLE SEALING.** Joggles are sealed with MIL-S-83430 sealant. For sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

6. **FILLET SEALING.** Fillets are sealed with MIL-S-83430 sealant. For sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

7. **FUEL TANK SEALING.** Cavity mating surfaces shall be fay sealed with MIL-S-83430 sealant. Joints within tank shall be fillet sealed and fasteners shall be installed wet with MIL-S-83430 sealant. For sealant preparation and application (A1-F18AC-SRM-200, WP011 00). Anti-chafing tape is used to prevent dam-

age to fuel tank. Apply tape over protruding head fasteners and metal lap joints. Tape is not required over exposed foam blocks, except those installed near installation panels and tank fittings. Fasteners, patterns, or joints which are covered by foam blocks do not require taping. For anti-chafing tape and foam block installation (A1-F18AC-460-300, WP039 00). Fuel tank cavity sealing must be completed and sealing compound cured before anti-chafing tape is applied.

8. **FIREWALL SEALING.** See figure 2. Openings and holes are sealed with MIL-S-38249, Type I sealant. Sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

9. **FIRE AND THERMAL BARRIER COATING.** See figure 2. Fire and thermal barrier coating, MMS-455, is applied over MMS-425 high temperature epoxy primer and MIL-S-38249 firewall sealant at thickness of $0.10 + 0.03 - 0.01$. For fire and thermal barrier coating (A1-F18AC-SRM-500, WP009 00).

10. **FOREIGN OBJECT CONTROL.** See figure 3.

11. Foreign object containment areas must be sealed to prevent foreign objects from escaping into engines, flight controls, or other compartments.

12. **FOREIGN OBJECT CONTAINMENT AREAS.** See figure 3. Foreign object containment areas are described below:

a. Containment Area I. Engine air inlet lip forward of Y419.000 and outboard of 74A322702 rib.

b. Containment Area II. Engine air inlet from Y419.000 to Y442.000, outboard of 74A322500 web, between inner and outer skins.

c. Containment Area III. Engine air inlet, right side only, from Y395.000 to Y419.000, between 74A322501 web and 74A322502 web.

d. Containment Area IV. Aft Center fuselage from Y453.000 to Y557.500, except in area of wing attachment, fuel tanks, main landing gear wheel well area, AMAD bay, and APU bay.

13. **FOREIGN OBJECT SEALING.** See figure 3. Presence of foreign objects trapped in containment areas after repairs, installation of parts, or fastener replacement is allowed if conditions below are met:

a. Foreign objects accessible during repair or installation of parts have been removed.

b. All tooling holes, joggles, slots, wire bundles through structure, and any other openings, except drain holes, are sealed with MIL-S-8340 sealant to prevent foreign objects from escaping into other compartments. For sealant preparation and application (A1-F18AC-SRM-200, WP011 00).

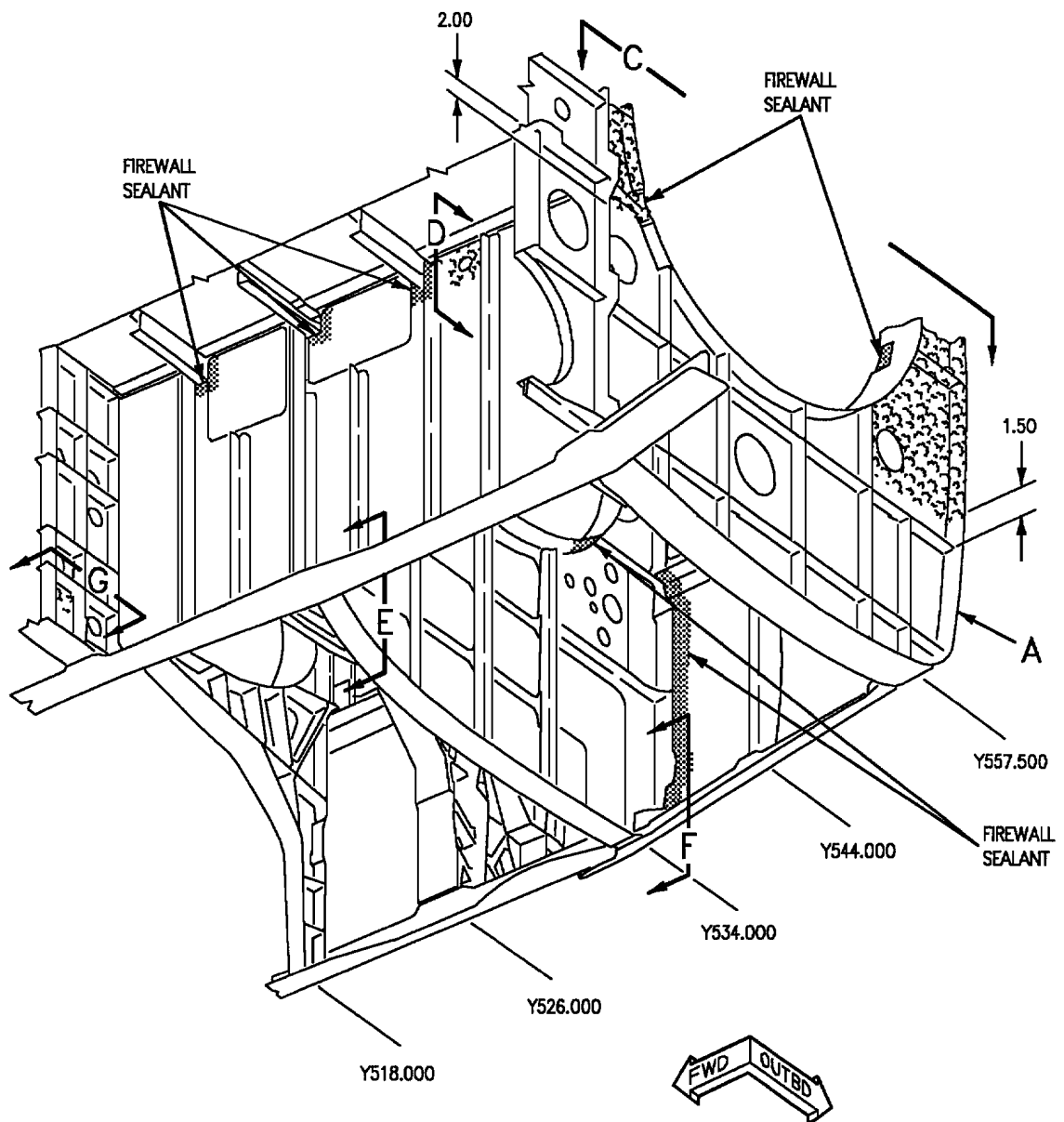
LEGEND



FIRE AND THERMAL BARRIER COATING



FIREWALL SEALANT



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Figure 1. Firewall Sealant and Fire and Thermal Barrier Coating (Sheet 1)

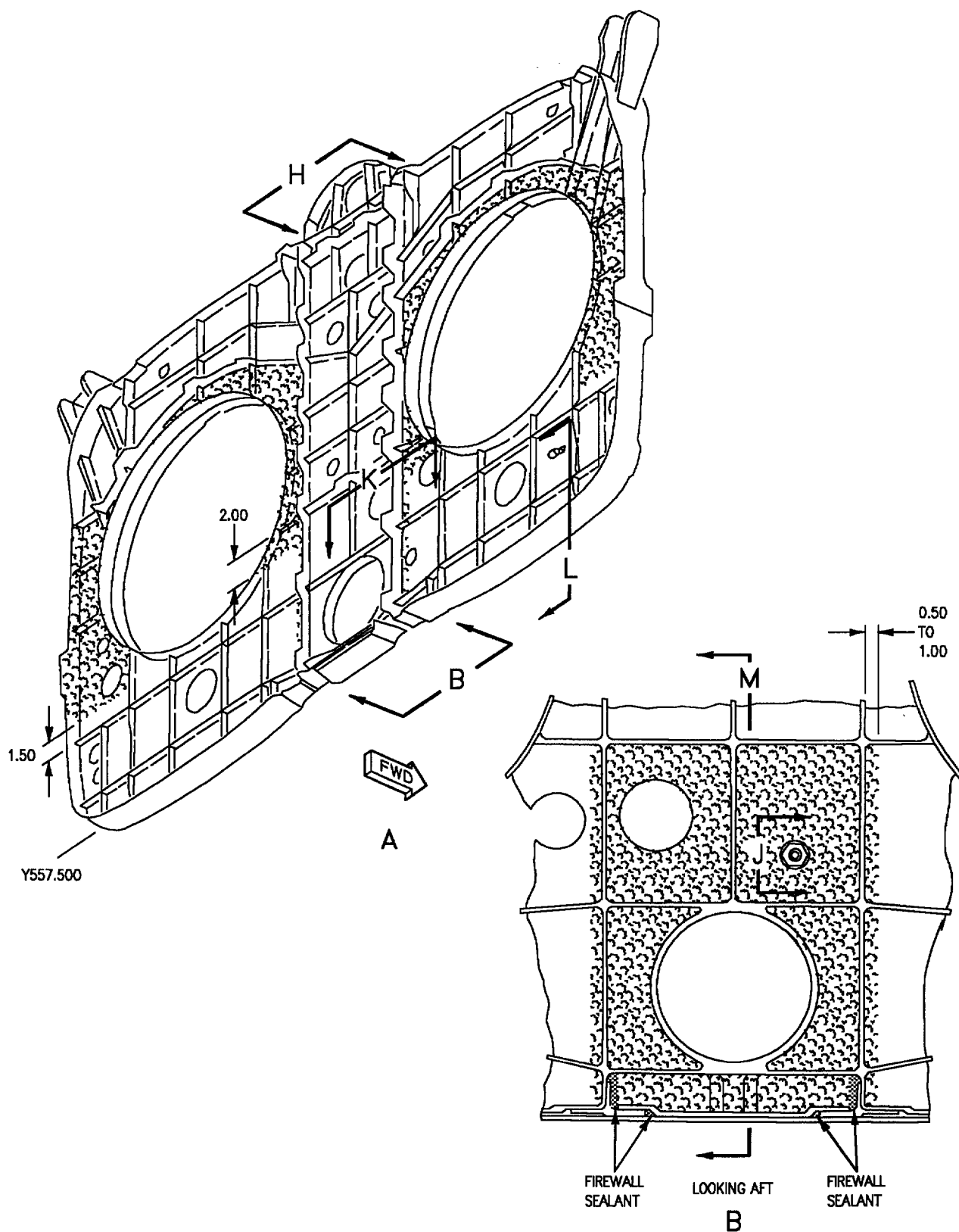


Figure 1. Firewall Sealant and Fire and Thermal Barrier Coating (Sheet 2)

03500102

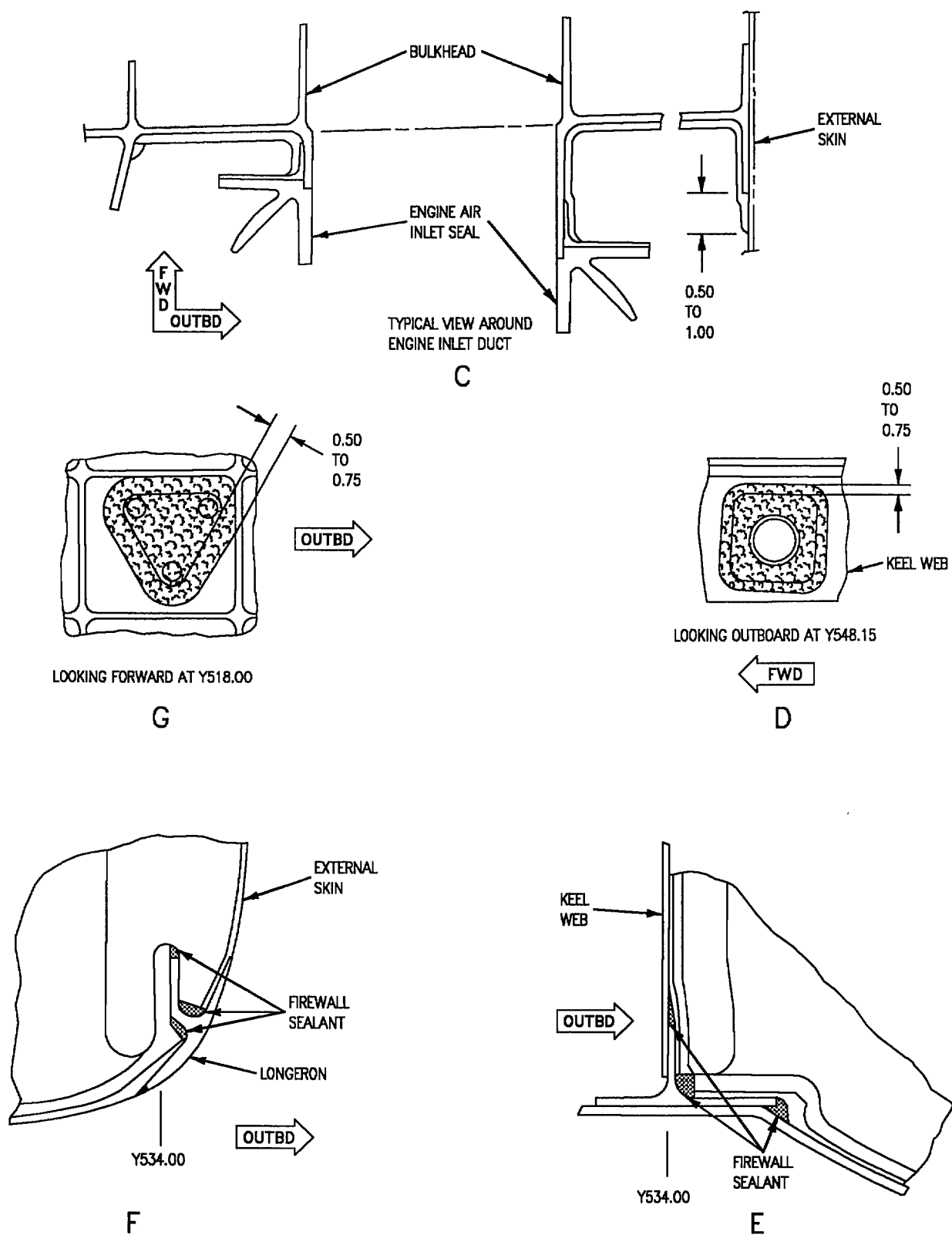
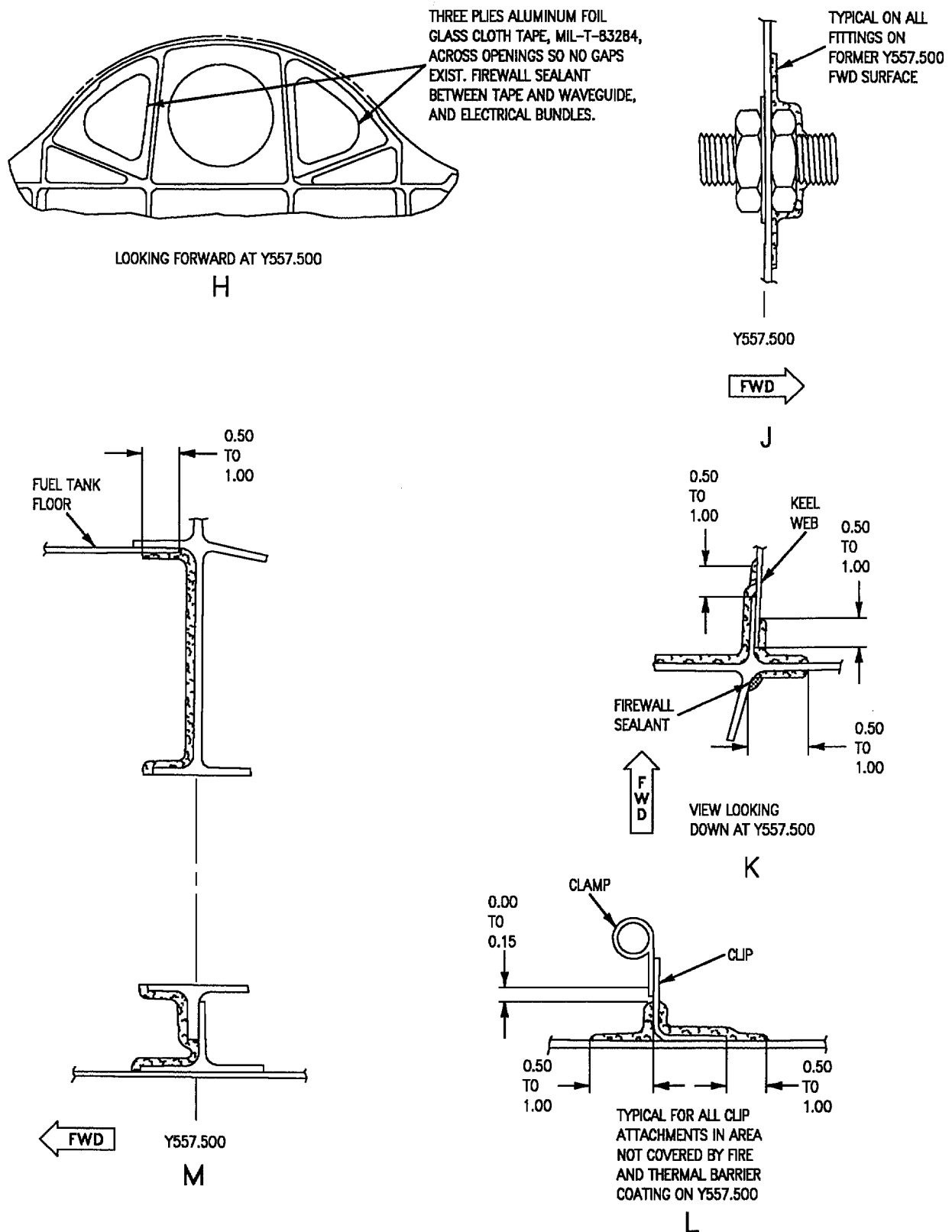


Figure 1. Firewall Sealant and Fire and Thermal Barrier Coating (Sheet 3)



03500104

Figure 1. Firewall Sealant and Fire and Thermal Barrier Coating (Sheet 4)

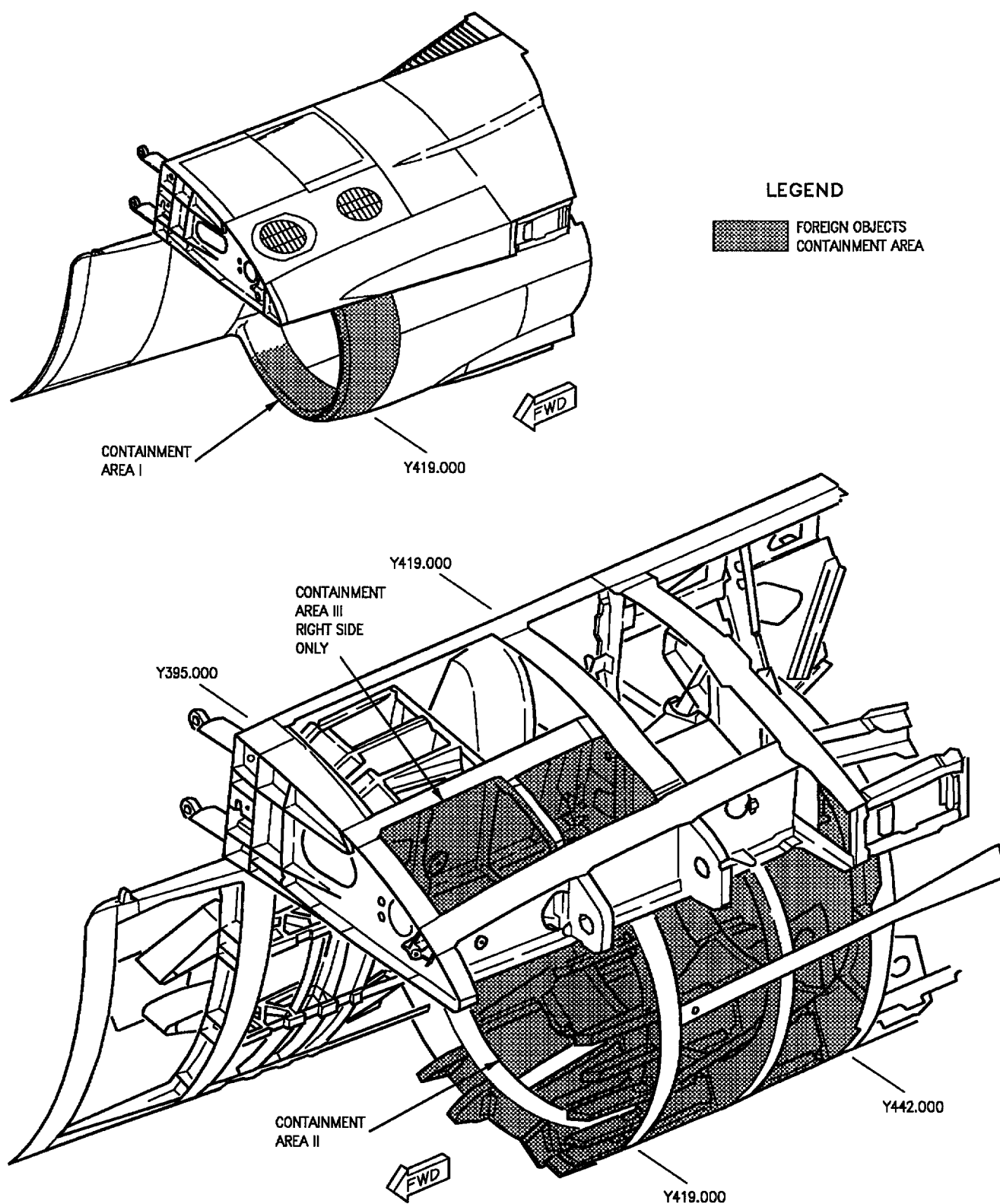


Figure 2. Foreign Object Containment Areas (Sheet 1)

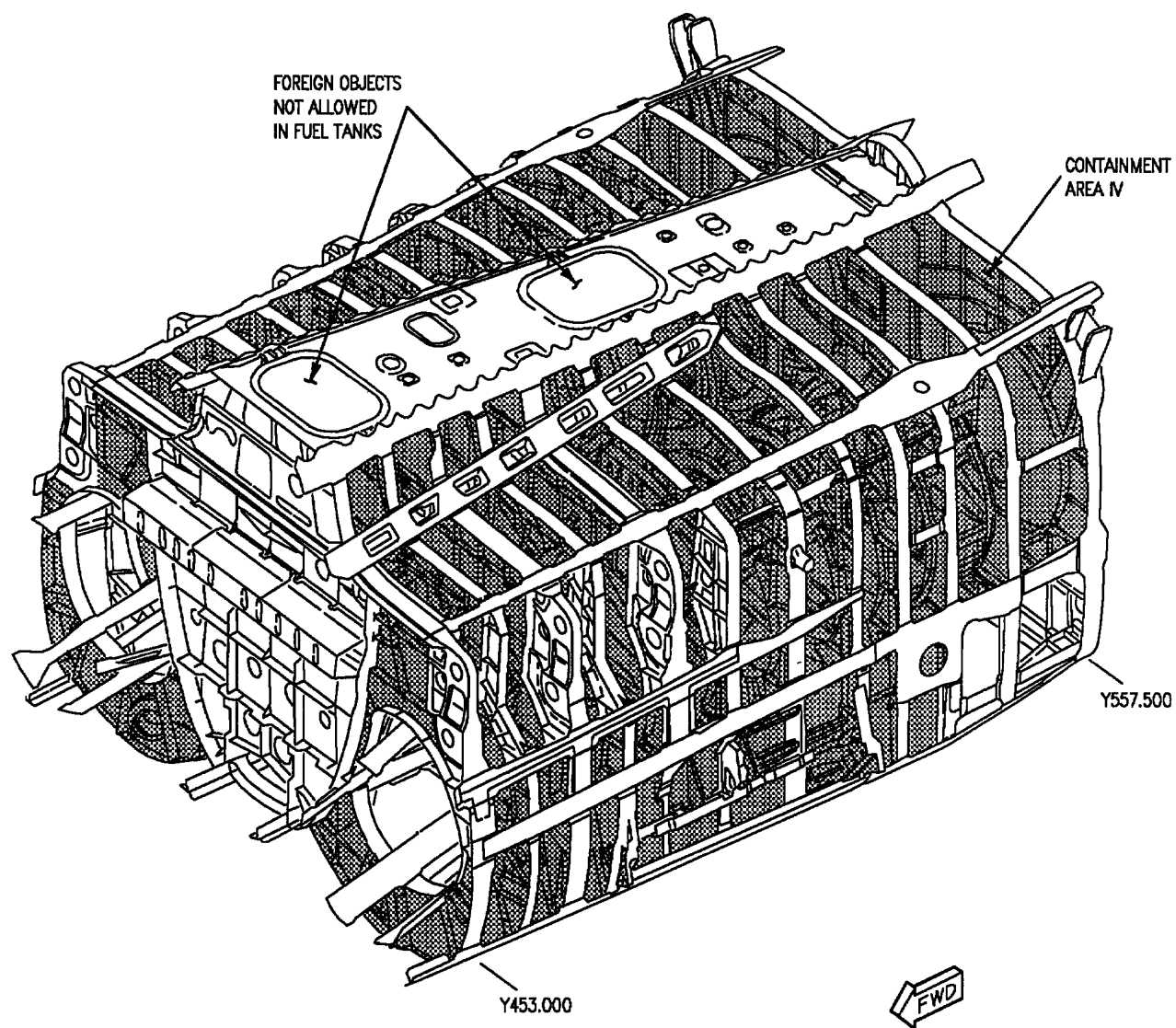
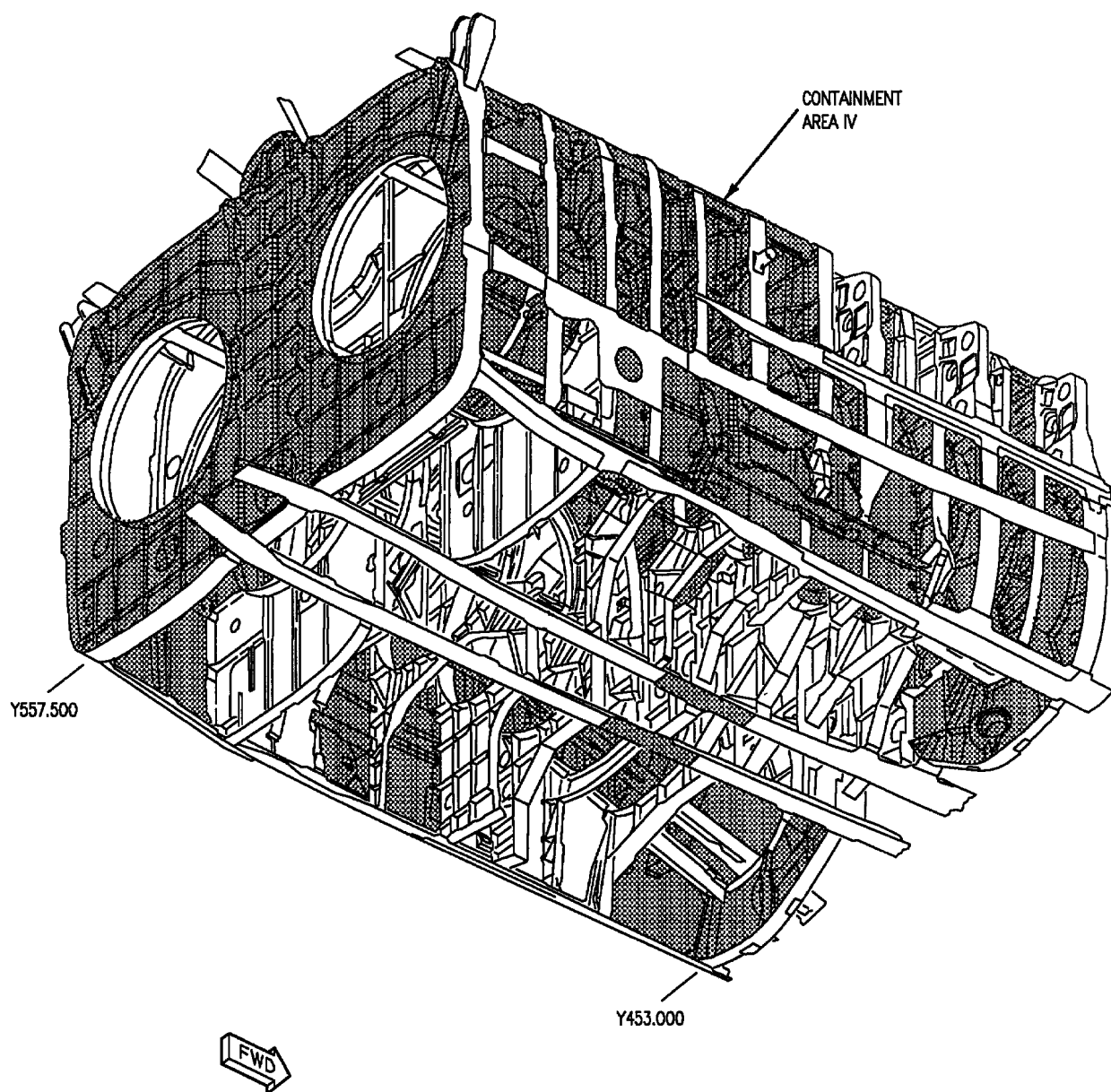


Figure 2. Foreign Object Containment Areas (Sheet 2)



03500203

Figure 2. Foreign Object Containment Areas (Sheet 3)

DEPOT MAINTENANCE

STRUCTURE REPAIR

MAIN LANDING GEAR SUPPORT FITTINGS ALIGNMENT DEVICE,
RE174324001-1 (LH) AND RE174324001-2 (RH)

Reference Material

Structure Repair Center Fuselage	A1-F18AC-SRM-230
Aft Center Fuselage MLG Wheel Well Area	WP019 00
Landing Gear and Related Systems	A1-F18AC-130-300
MLG Trunnion Assembly	WP037 00
MLG Forward Door	WP049 00
Line Maintenance Procedures	A1-F18AC-LMM-000

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Index RE to Aircraft For Installation	3
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Removal of RE174324001-1/-2 Alignment Device	4

Record of Applicable Technical Directives

None

1. MAIN LANDING GEAR SUPPORT FIT-
TINGS ALIGNMENT DEVICE,
RE174324001-1 (LH) AND
RE174324001-2 (RH).

attach point, side brace attach point, actuator attach point, and planning mechanism attach point.

2. Main landing gear support fittings alignment device is used for component installation and replacement. Analysis of MLG support fittings will help to determine where alignment device RE174324001-1/-2 can be attached to aircraft.

a. Alignment device is made to attach to forward inboard trunnion attach point, aft outboard trunnion

b. Alignment device must index into both forward and aft trunnion points and at least one other point in step a, or it must be optically aligned to aircraft using target points in figure 1, detail A, and secured in place. Tooling balls are provided for this purpose. Aircraft must be jacked and optically aligned.

3. INSTALLATION OF RE174324001-1/-2 ALIGNMENT DEVICE. See figure 1.

4. Procedure will allow for installation of RE174324001 alignment device on either left or right side.

Support Equipment Required

Nomenclature	Part Number or Type Designation
Multipurpose Dolly (GFE)	215-00303-50
Tripod Jack	59J6185

Materials Required

Specification or Part Number	Nomenclature
C-clamps (As Req'd.)	-
Shims (As Req'd.)	-

5. AIRCRAFT PREPARATION.

a. Remove electrical and hydraulic power from aircraft (A1-F18AC-LMM-000).

b. Remove MLG forward door and hinges (A1-F18AC-130-300, WP049 00).

c. Remove MLG (A1-F18AC-130-300, WP037 00).

6. ALIGNMENT DEVICE PREPARATION AND INSTALLATION.

NOTE

Rigging fixture (subassembly J) is used to support RE in aircraft.

a. Install rigging fixture to mold line, along MLG door opening periphery.

b. C-clamp often as possible to aircraft along outboard longeron (74A324105), bulkhead (74A324202) at Y453.000 and inboard longeron hinge support (74A324116).

c. Remove two nuts (detail 170) and two plates (detail 181) from subassembly J.

d. Disconnect hydraulic line 74A695843-1011 and temporarily reposition.

e. Disconnect hydraulic line 74A695848-1003 and temporarily reposition.

f. Install brace (detail 179) on aft bulkhead as shown on figure 1, view B.

g. Install two plates (detail 181) and two nuts (detail 170) whole aligning with locator buttons (detail 169).

h. Tighten two nuts (detail 170).

i. Adjust turnbuckle (detail 168), if required, until subassembly J is held firmly in place.

j. Remove six cap screws (detail 173) from subassembly J.

k. Index actuator bracket point by installing subassembly B with two L Pins (detail 104) and two cap screws (detail 149), as shown, on subassembly A.

l. Install subassembly A, use multipurpose dolly, P/N 215-00303-50.

(1) Install weld assemblies (details 22, 24, and 26), figure 1, detail C, into subassemblies H, L, and K.

(2) Adjust swivel head screws (detail 160) against weld assemblies 22, 24, and 26.

m. Install subassemblies H, L, and K as shown on figure 1, view B, into subassembly J.

n. Replace six cap screws (detail 173) holding subassemblies H, L, and K onto subassembly J.

o. Retract screws (detail 160) on subassemblies H, L, and K.

NOTE

Adjustment of RE, relative to aircraft is done by adjusting swivel head screws (detail 160) against weld assemblies (detail 22, 24, and 26).

7. INDEX RE TO AIRCRAFT FOR CHECKING.**NOTE**

First index forward and aft trunnion points, then index other three points. Sequence of other three points is not critical. If one or both trunnion points will not index, RE must be optically aligned to aircraft coordinate system as shown in detail A. If RE indexes into both forward and aft trunnion points and at least one other point, it is not required to optically set RE. Remaining points are set relative to RE.

a. Index forward inboard trunnion point by installing pin (detail 126) through block (detail 122) and into trunnion self aligning bearing (74J418000).

b. Index aft outboard trunnion point by installing pin (detail 125) through block (detail 121) and into trunnion self aligning bearing (74J418001).

c. Use half turn screw (detail 154) to hold pins in place.

d. Use gage (detail 156) against blocks (details 121 and 122) to check GO/NO GO. See View E.

NOTE

Install subassembly B before subassembly A is raised for installation.

e. Install pin (detail 128) through actuator bracket and subassembly B.

f. Check gap between blade of subassembly B and surface of bushing (ST4M192C14-30/-35). Check both sides, as shown. Maximum difference in gaps is 0.116. See View G.

g. Index side brace support point by installing subassembly F with two L Pins (detail 147) and four cap screws (detail 149), as shown, on subassembly A, figure 1, view B.

h. Install pin (detail 129) through side brace support and subassembly F.

i. Use gage (detail 158) against bushing and weld assembly (detail 16) to check GO/NO GO. See View J.

j. Index structure support assembly point by installing subassembly D with two L Pins (detail 104) and two cap screws (detail 149), as shown, on subassembly A figure 1, view B.

k. Install pin (detail 120) through structure support assembly and subassembly D.

l. Use gage (detail 155) against bushing and weld assembly (detail 14) to check GO/NO GO. See View L.

8. INDEX RE TO AIRCRAFT FOR INSTALLATION.**NOTE**

Previous RE alignment procedures apply for installation.

a. Remove damaged actuator bracket.

b. Index new actuator bracket by installing subassembly C with two L Pins (detail 147) and two cap screws (detail 149), as shown, on subassembly A.

c. Install pin (detail 128) through new actuator bracket and subassembly C.

d. Shim both sides of subassembly C to surface of bushing (ST4M192C14-30/-35) equal.

e. Transfer hole pattern to new bracket and drill new holes.

f. Attach new bracket to aircraft with existing hardware.

g. Remove damaged side brace support.

h. Index new side brace support by installing subassembly G with two L Pins (detail 104) and four cap screws (detail 149), as shown, on subassembly A.

i. Install pin (detail 129) through new side brace support and subassembly G.

j. Use 0.075 shim to set side of subassembly G to surface of bushing (74A324573-2003).

k. Transfer hole pattern to new support and drill new holes.

l. Attach new bracket to aircraft with existing hardware.

m. Remove damaged structure support assembly.

n. Index new structure support assembly by installing subassembly E with two L Pins (detail 147) and two cap screws (detail 149), as shown, on subassembly A.

o. Install pin (detail 120) through new structure support assembly and subassembly E.

p. Use 0.100 shim to set side of subassembly E to surface of bushing (ST4M192C10-48/-54).

q. Transfer hole pattern to new support assembly and drill new holes.

r. Attach new support assembly to aircraft with existing hardware.

s. If forward inboard trunnion and aft outboard trunnion do not index, the 74A324204 and 74A324202 bulkheads should be replaced.

t. For replacement of trunnion bearings and bushings refer to (A1-F18AC-SRM-230, WP019 00).

u. Recheck all five attach points.

9. REMOVAL OF RE174324001-1/-2 ALIGNMENT DEVICE.

a. Remove all pins used for indexing.

b. Remove bolts and L Pins from subassemblies.

c. Remove subassemblies from subassembly A.

d. Loosen screws (detail 160) holding details (22, 24, and 26), of view A.

e. Remove subassembly A.

f. Remove six cap screws (detail 173) holding subassemblies H, L, and K on to subassembly J.

g. Remove subassemblies H, L, and K.

h. Replace six cap screws (detail 173) into subassembly J.

i. Loosen turnbuckle (detail 168).

j. Remove two nuts (detail 170) and two plates (detail 181).

k. Remove brace (detail 179) from aft bulkhead.

l. Replace two nuts (detail 170) and two plates (detail 181) onto subassembly J.

m. Remove C clamps.

n. Remove subassembly J.

o. Install MLG (A1-F18AC-130-300, WP037 00).

p. Install MLG forward door and hinges (A1-F18AC-130-300, WP049 00).

q. Install electrical and hydraulic power to aircraft, if required (A1-F18AC-LMM-000).

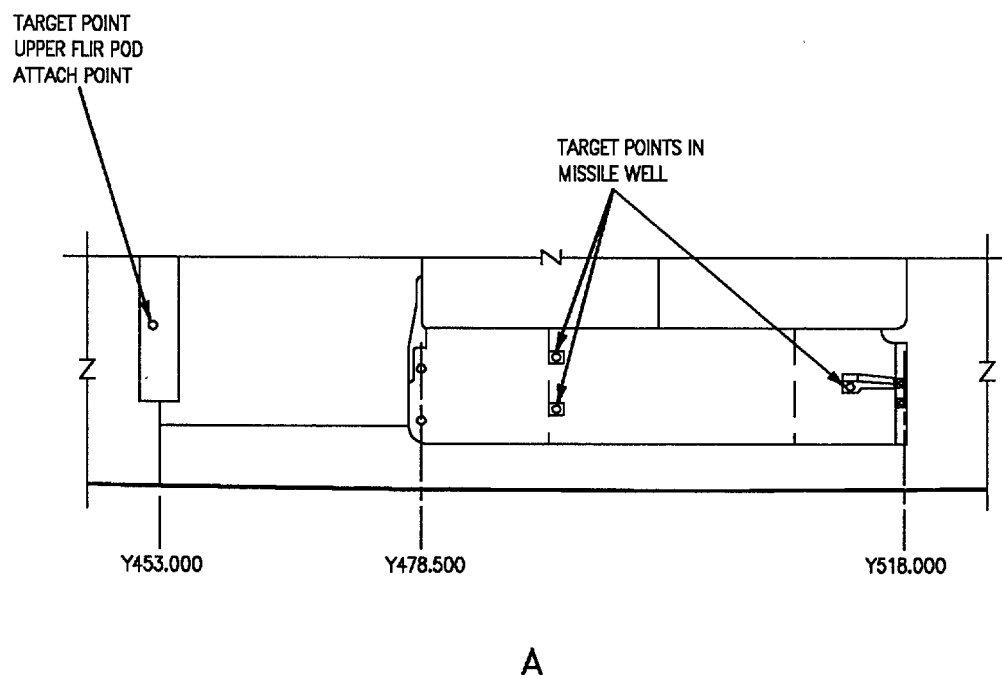
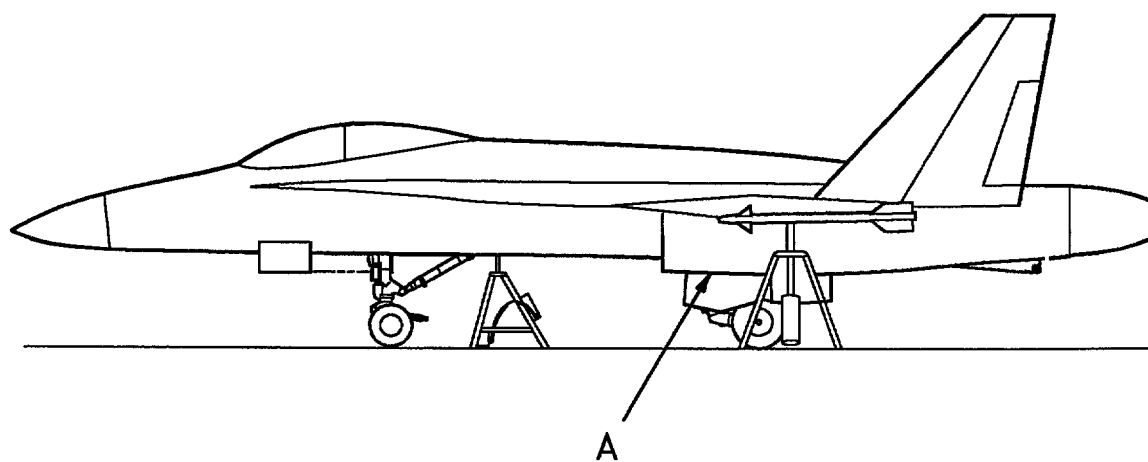


Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 1)

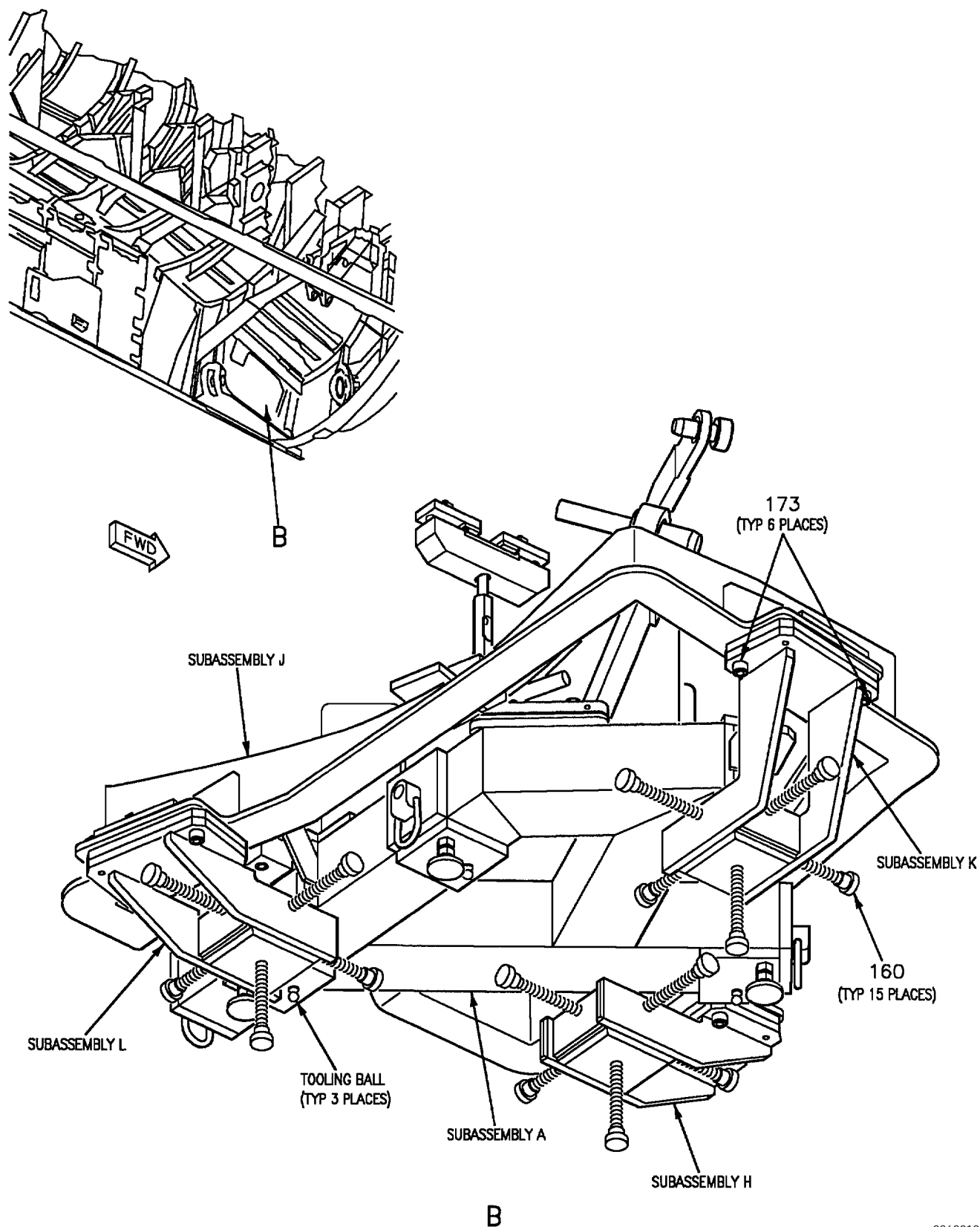
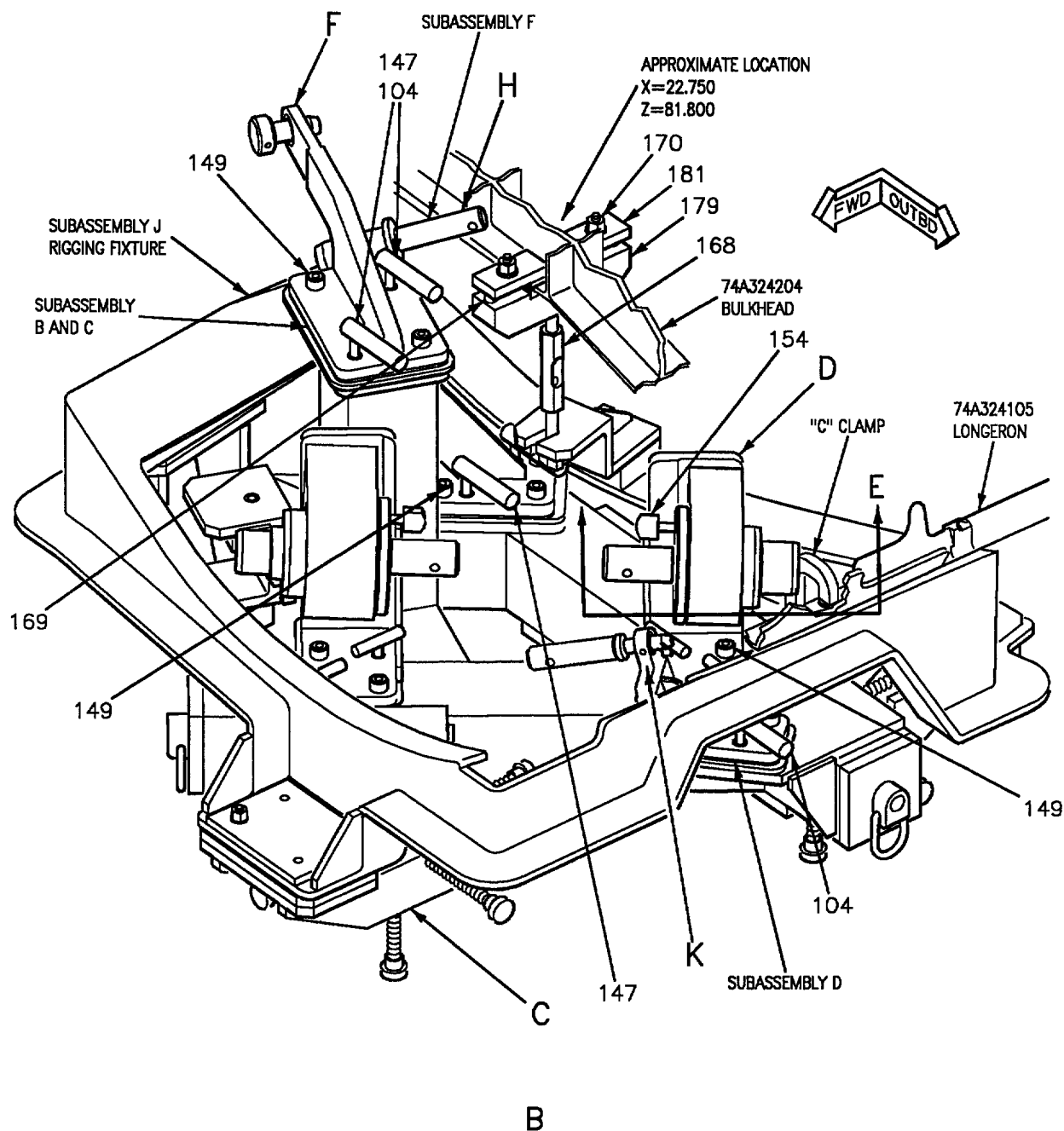
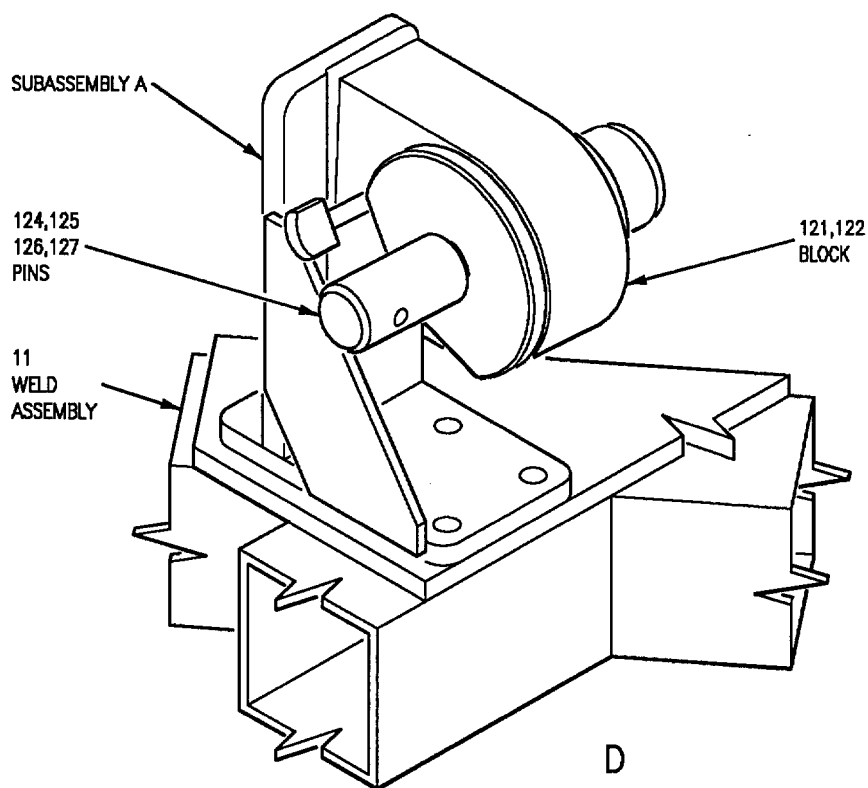
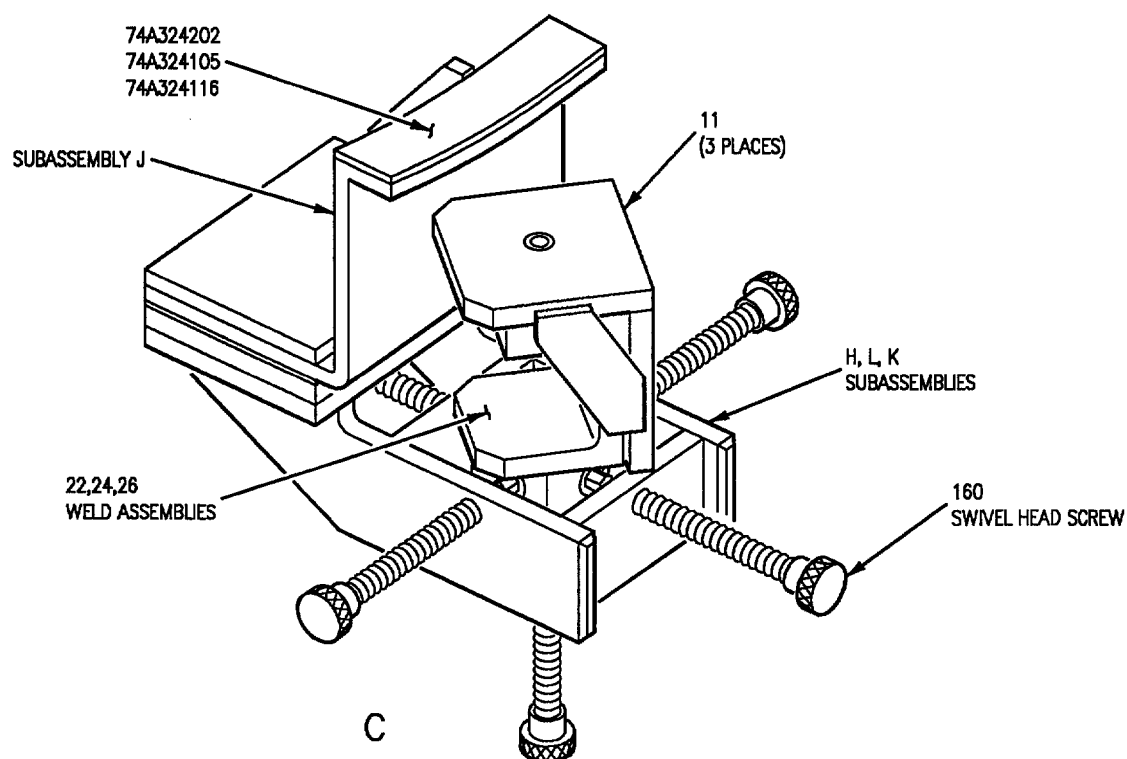


Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 2)



03600103

Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 3)



03600104

Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 4)

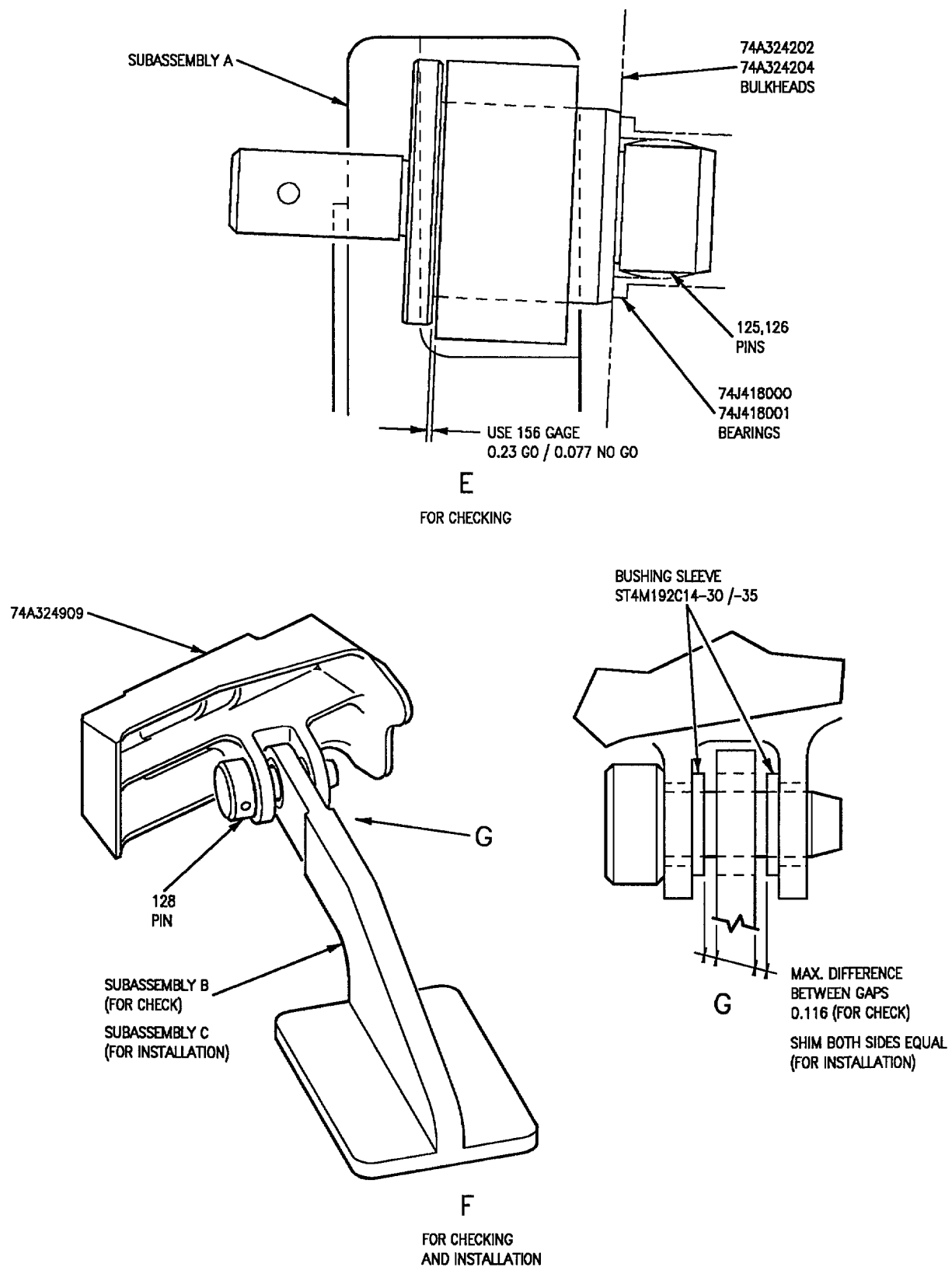
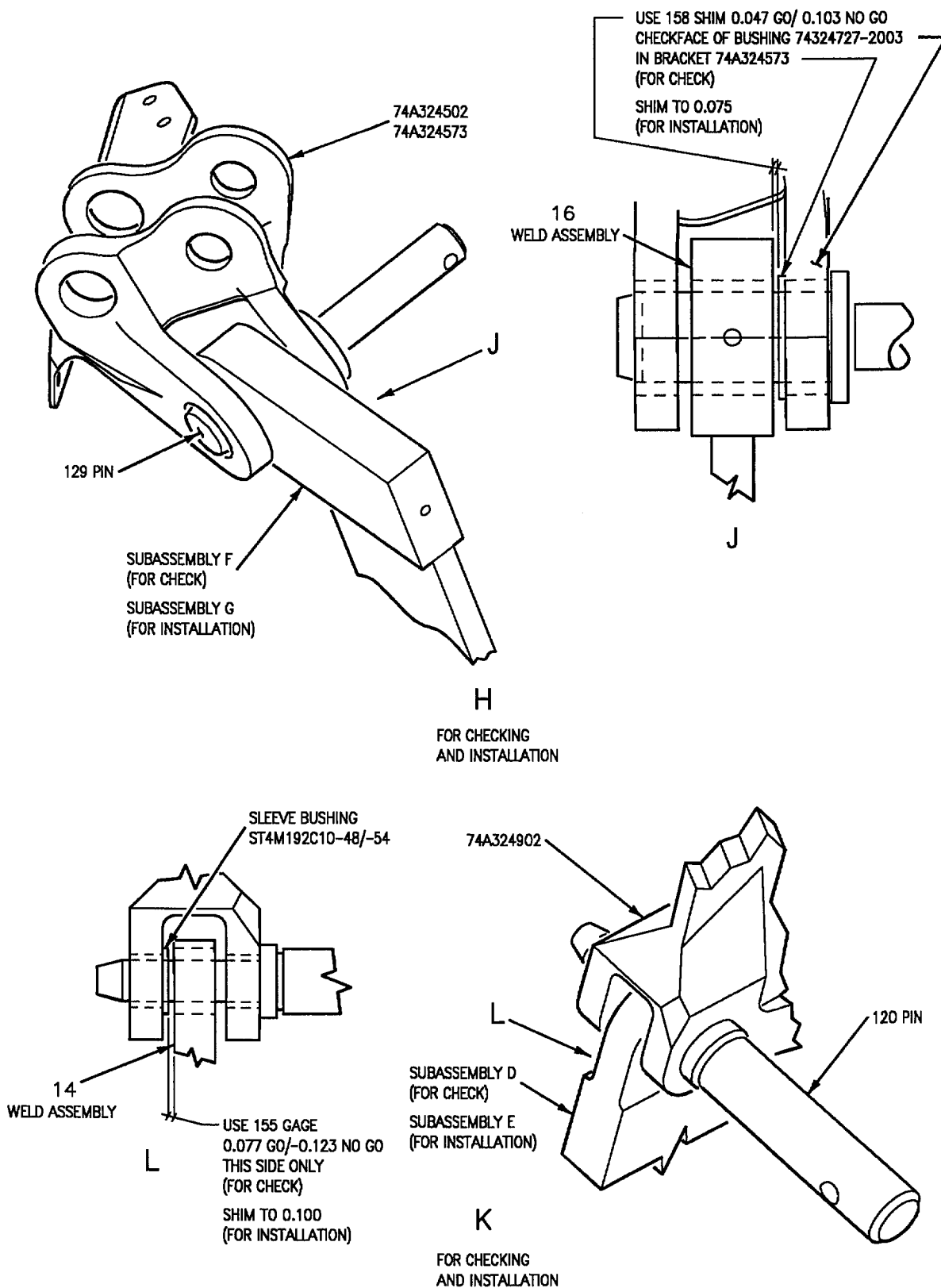


Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 5)

03600105



03600106

Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 6)

DETAIL NO.	NAME	FUNCTION
Subassembly A	Weld assembly fixture	Holds various subassemblies and parts used for checking alignment.
Subassembly B	Weld assembly and parts	Used to check actuator bracket.
Subassembly C	Weld assembly and parts	Used to install new actuator bracket.
Subassembly D	Weld assembly and parts	Used to check structure support assembly.
Subassembly E	Weld assembly and parts	Used to install new structure support assembly.
Subassembly F	Weld assembly and parts	Used to check side brace support.
Subassembly G	Weld assembly and parts	Used to install new side brace support.
Subassembly H	Weld assembly	Used to support weld assembly (detail 22).
Subassembly J	Rigging Fixture	Supports RE in aircraft.
Subassembly K	Weld assembly	Used to support weld assembly (detail 24).
Subassembly L	Weld assembly	Used to support weld assembly (detail 26).
11	Weld assembly	Part of subassembly A.
14	Weld assembly	Part of subassembly D.
16	Weld assembly	Part of subassembly F.
22	Weld assembly	Used to support weld assembly (detail 11).
24	Weld assembly	Used to support weld assembly (detail 11).
26	Weld assembly	Used to support weld assembly (detail 11).
104	L Pin	Holds subassembly B, D, and G onto subassembly A.
120	Pin	Used to index subassemblies D and E thru structure support assembly.

Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 7)

DETAIL NO.	NAME	FUNCTION
121 122	Block	Part of subassembly A.
124 125	Pin	Indexes aft outb'd trunnion into self-align bearings.
126 127	Pin	Indexes fwd inb'd trunnion into self-align bearings.
128	Pin	Used to index subassembly B and C thru actuator bracket.
129	Pin	Used to index subassembly F and G thru side brace support.
147	L Pin	Holds subassembly F, C, and E to subassembly A.
149	Cap screw	Holds subassembly B, F, D, G, onto subassembly A.
154	Half turn screw	Holds pins (detail 125 and 126) in place while indexing.
155	Gage	Used against bushing and weld assembly (detail 14) to check GO/NO GO.
156	Gage	Used against block 121 and 122 to check GO/NO GO.
158	Gage	Used against bushing and weld assembly (detail 16) to check GO/NO GO.
160	Swivel head screw	Holds weld assemblies 22, 24, and 26 in place.
168	Turn Buckle	Used to support RE at the aft bulkhead.
169	Locator button	Used to locate plates (detail 181) to bulkhead.
170	Nut	Used to hold subassembly J to aft bulkhead.
173	Cap screw	Holds subassembly H, L, and K to subassembly J.
179	Brace	Used to hold subassembly J to aft bulkhead.
181	Plate	Used to hold subassembly J to aft bulkhead.

Figure 1. Installation and Use of RE174324001-1/-2 Alignment Device (Sheet 8)

DEPOT MAINTENANCE

STRUCTURE REPAIR

CENTER FUSELAGE WING ATTACH LUGS CHECK FIXTURE

PART NO. RE174110000-1/-2

Reference Material

Structure Repair, General Information	A1-F18AC-SRM-200
Accessory Kits and Spray Mist Coolant Tank	WP004 16
Wings Lugs or Fuselage Wing Attach Lugs Bushing Installation Kit	WP004 36

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Inspection Procedure For Center Fuselage Wing Attach Lugs at Fuselage Stations Y453.000, Y470.500, and Y488.000	2
Procedures For Machining Wing Attach Lugs/Bushings I.D.	2
Setting Up to Machine I.D. of Any Bushing or Lug Hole in Lower Row	7
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Setting Up to Machine I.D. of Bushing or Lug, Location 3, Y488.000	6
Setting Up to Machine I.D. of Bushing or Lug, Location 4, Y453.000	7
Setting Up to Machine I.D. of Bushing or Lug, Location 5, Y470.500	8
Setting Up to Machine I.D. of Bushing or Lug, Location 6, Y488.000	9

Record of Applicable Technical Directives

None

1. CENTER FUSELAGE WING ATTACH LUGS CHECK FIXTURE.

2. Center fuselage wing attach lugs check fixture (check fixture) is used on F/A-18 center fuselage wing attach lugs to make sure attach points are aligned and structurally sound. Center fuselage provides load paths for distribution of flight loads and support for wing-to-fuselage structural junction.

Each wing-to-fuselage splice has three shear and moment carry-through ties and one aft shear tie. The carry-through ties at each point, bulkhead, consist of pins at upper and lower points joining wing clevises to center fuselage lugs, bulkheads. The one shear tie consists of a machined pin on the 74A324308 former which engages a bearing housed in wing closure rib allowing vertical load transfer.

Support Equipment Required

Nomenclature	Part Number or Type Designation
C-Clamp	-
Hoist	-
Portable Crane	1262AS100-1

Materials Required

None

3. INSPECTION PROCEDURE FOR CENTER FUSELAGE WING ATTACH LUGS AT FUSELAGE STATIONS Y453.000, Y470.500, AND Y488.000. See figures 1 and 2.

a. Visually inspect for broken or cracked bushings which must be removed and replaced using RE974110002-1 (A1-F18AC-SRM-200, WP004 36).

b. Connect locally supplied hoist or portable crane, 1262AS100-1 to subassembly A, figure 2, view A.

c. Carefully move subassembly A into position.

d. Pin subassembly A into position;

(1) Pin lower aft lug of subassembly A to center bulkhead Y488.000 using drift pin (detail 113), view B.

(2) Rotate subassembly A up into position and pin upper forward lug to bulkhead Y453.000 using drift pin (detail 103), view B.

(3) Pin subassembly A into position at remaining upper center and aft points and lower forward and center points using pins (details 113 and 103) respectively, view B.

e. Remove hoist or portable crane.

f. Slide subassembly A forward so clevis (detail 112), view C, is tight against aft side of 74A324204 bulkhead lug at Y470.500.

g. Inspect lower forward side of 74A324204 bulkhead using go-no go gage (detail 119), view D.

h. Inspect upper forward and aft sides of 74A324204 bulkhead using go-no go gage (detail 109), view D.

i. Inspect upper forward and aft sides of 74A324202 and 74A324206 bulkheads using go-no go gage (detail 108), view D.

j. Inspect lower forward and aft sides of 74A324202 and 74A324206 bulkheads using go-no go gage (detail 110), view D.

k. Remove subassembly A and stow.

4. INSPECTION OF AFT SHEAR TIE LUG. See figures 1 and 2.

a. Connect locally supplied hoist or portable crane, 1262AS100-1 to subassembly A, view A.

b. Carefully move subassembly A into position.

c. Pin subassembly A into position;

(1) Pin lower aft lug of subassembly A to center bulkhead Y488.000 using drift pin (detail 113), figure 2, view B.

(2) Rotate subassembly A up into position and pin upper forward lug to bulkhead Y453.000 using pin (detail 103), view B.

d. Slide subassembly A forward so clevis (detail 112), view C, is tight against aft side of Y470.500 bulkhead lug.

e. Inspect existing aft shear tie lug using go-no go gage (details 244 and 245), view E, against locator block (detail 123), view F. Hold locator block in position with a c-clamp while inspecting.

f. Inspect new aft shear tie lug using go-no go gage, nominal thickness gage, (detail 243), view E, against locator block (detail 123), view F. Hold locator block in position with a c-clamp while inspecting.

g. Remove subassembly A and stow.

NOTE

Only one bushing is machined at a time with fixture located at four other lugs.

5. PROCEDURE FOR MACHINING WING ATTACH LUGS/ BUSHINGS I.D. See figure 3. To machine upper forward or aft bulkheads/bushings, install (details 194, 196, 230, and 175) on subassembly B before hoisting onto fuselage, view A, B, C; figure 5.

To machine lower forward or aft bulkheads/bushings, install (details 195, 175, and 230) on subassembly B before hoisting onto fuselage, view A, F, and G, figure 9.

a. Connect locally supplied hoist or portable crane to subassembly B, figure 3, view A.

b. Carefully move subassembly B into position.

c. Pin subassembly B, view A, to lugs:

(1) Install drift pin (detail 158, bushing I.D., or detail 216, lug I.D.), view B, in 74A324202 bulkhead, upper hole.

(2) Install drift pin (detail 159, bushing I.D., or detail 217, lug I.D.), view C, with pilot bushing (detail 189), view D, in 74A324206 bulkhead, upper hole.

(3) Install drift pin (detail 160, bushing I.D. or detail 218, lug I.D.), view E, in 74A324202 bulkhead, lower hole.

(4) Use drift pin (detail 161, bushing I.D. or detail 219, lug I.D.), view F, with pilot bushing (detail 189), view D, in 74A324206 bulkhead, lower hole.

6. Setting up to Machine I.D. of Any Bushing or Lug Hole in Upper Row. See figures 1 and 4.

a. Location 5:

(1) Install pin (detail 171, bushing I.D.; detail 199, nominal lug I.D.; or detail 237, first oversize lug I.D.), view B, through subassembly B, see figure 4.

(2) Install jam nuts (detail 183), view C.

(3) Engage center bulkhead, 74A324204, install jam nuts (detail 186), view C.

(4) Engage pilot bushing (detail 188), view D.

(5) Secure aft end with hex bolt (detail 206), 1/2-13X2 LG, view H.

(6) Secure forward end with hex bolt (detail 207), view H, 1-8X2 LG, and flat washer (detail 187), view E.

b. Location 6:

(1) Remove drift pin (detail 161).

(2) Install on location 6 pin (detail 173, bushing I.D.; detail 198, nominal lug I.D.; or detail 238, first

oversize lug I.D.), view F, through 74A324206 bulkhead, view A.

(3) Install jam nuts (detail 186), view C.

(4) Install from aft end pilot bushing (detail 189), view D.

(5) Secure with hex bolt (detail 206), 1/2-13X2 LG, view H.

c. Location 4:

(1) Remove drift pin (detail 160).

(2) Install on location 4, pin (detail 169, bushing I.D.; detail 201, nominal lug I.D.; or detail 235, first oversize lug I.D.), view G, through subassembly B, view A.

(3) Install jam nuts (detail 184), view C, through 74A324202 bulkhead.

(4) Secure in position with hex bolt detail 207, 1-8X2 LG, view H, and flat washer (detail 187), view E.

7. Setting up to Machine I.D. of Bushing or Lug, Location 1, Y453.000. See figure 5.

a. Location 2:

(1) Attach to guide tube (detail 165, bushing I.D.; detail 181, nominal lug I.D.; or detail 242, first oversize lug I.D.), view F, handle (detail 154), view G.

(2) Slide guide tube (detail 165), view F, through assembled RE174110000 from aft side engaging jam nut (detail 196), view C, bulkhead and jam nut (detail 194), view C.

(3) Remove handle (detail 154), view G.

(4) Install rotary bushing (detail 175), view A, and keeper (detail 229), view B, into (detail 155), view E.

(5) Remove drift pins previously installed, see figure 3, as required.

b. Location 1: Install rotary bushing (detail 175), view A, into (detail 157), view H, and lock on with keeper (detail 229), view B.

c. Location 3:

(1) Install pin (detail 167, bushing I.D.; detail 204, nominal lug I.D.; or detail 232, first oversize lug I.D.), view J, through 74D324206 bulkhead, and through jam nuts (detail 185), view C, then through pilot bushing (detail 189), view K.

(2) Secure this assembly with hex bolt (detail 206), 1/2-13x2 LG, view A.

d. Install subassembly C, view L, using rods (detail 147), view M and handle (detail 153), view N.

e. Secure rods (detail 147), view M, in position using set screws (detail 208), 4 places, and swing "C" washers (detail 209), view P, 2 places.

f. Install 2 piece boring bar (detail 117 and 119) of RE374320000 tool set from forward side, sliding onto output shaft (detail 139), view L, of subassembly C offset drive.

g. Lock into position against drive groove.

h. Attach lock on collar (detail 177), view T, and bushing (detail 212), view S, to adapter (detail 176), view U.

i. Thread adapter (detail 176), view U, onto positive feed drilling machine, 74D110314-1005, view R.

j. Slide subassembly C, view L, forward on rods (detail 147), view M.

k. Install drive adapter (detail 178), view V, onto threaded spindle adapter, (detail 176), view U, of 74D110314-1005 positive feed drilling machine.

l. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lockon collar (detail 177), view T, into (detail 174), view X and rotating counterclockwise to engage lock bushing (detail 212), view S, with lock screw (detail 227), view S.

m. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.

n. Slide subassembly C aft fully engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.

o. Lock drive adapter (detail 178), view V, into groove by rotating clockwise.

p. Install correct cutter, refer to table 1.

Table 1. Machining Data




Location	Material	Pass No. 	Cutter No. 	Cutter Dia	Finish Hole Dia	Tolerance	Nom.	First Ovs.
1,2,3	Alum.	1	-113	2.4380	2.4375	+0.0020 -0.0000		X
	Becu.	1	-111	2.2350				
	Becu.	2	-112	2.2490				
	Becu.	3	-114 	2.2500	2.2500	+0.0007 -0.0000	X	
4,5,6	Alum.		-123	2.6850	2.6845	+0.0020 -0.0000		X

Table 1. Machining Data (Continued)

Location	Material	Pass No. 3	Cutter No. 3	Cutter Dia	Finish Hole Dia	Tolerance	Nom.	First Ovs.
	Becu.	1	-121	2.4850		± 0.0003		X
	Becu.	2	-122	2.4990				
	Becu.	3	-124 4	2.5000	2.5000	+0.0007 -0.0000	X	
<p style="text-align: center;">NOTES</p> <p>1. Speed 180 RPM (110 X 160%) 176 RPM. 2. Feed 0.3 IPM = 0.002/Rev. 3 Cutters and boring bars are details of RE374320000-1. 4 Details 114 and 115 Rou-A-Finish tool requires detail 125 adapter.</p>								

q. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8 from pin (detail 167), view J.

r. Inspect boring bar condition and cleanliness.

s. Lock boring bar onto output shaft of offset drive.

t. Attach air hose to positive feed drilling machine.

u. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).

v. Machine bushing I.D./nominal or first oversize lug diameter.

w. Inspect bushing/lug I.D., refer to table 1.

8. Setting up to Machine I.D. of Bushing or Lug Location 2, Y470.500. See figure 6.

NOTE

Subassembly C must be removed to allow clearance for removing details installed.

a. Loosen four set screws (detail 208), view L, figure 5.

b. Loosen two swing "C" washers (detail 209), view P.

c. Remove slide rods (detail 147), view M, aft using handle (detail 153), view N.

d. Location 1:

(1) Remove drift pin (detail 158).

(2) Install rotary bushing (detail 175), view A, keeper (detail 230), view C, and jam nut (detail 194), view D, figure 6.

(3) Install guide tube (detail 162, bushing I.D.; detail 179, nominal lug I.D.; and detail 241, first oversize lug I.D.), view B.

e. Location 3:

(1) Install pin (detail 167, bushing I.D.; detail 204, nominal lug I.D.; or detail 232, first oversize lug I.D.), view E, through 74D324206 bulkhead, and through jam nuts (detail 185), view G, then through pilot bushing (detail 189), view F.

(2) Secure this assembly with hex bolt (detail 206), 1/2-13x2 LG, view A.

f. Install subassembly C, view L, using rods (detail 147), view M and handle (detail 153), view N, figure 5.

g. Secure rods (detail 147), view M, in position using set screws (detail 208), 4 places, and swing C washers (detail 209), view P, 2 places.

h. Install 2 piece boring bar (detail 117 and 119) of RE374320000 tool set, from forward side, sliding onto output shaft (detail 139), view L, of subassembly C offset drive.

- i. Lock into position against drive groove.
 - j. Attach lock on collar (detail 177), view T, and bushing (detail 212), view S to adapter (detail 176), view U.
 - k. Thread adapter (detail 176), view U, onto positive feed drilling machine, 74D110314-1005, view R.
 - l. Slide subassembly C, view L, forward on rods (detail 147), view M.
 - m. Install drive adapter (detail 178), view V, onto threaded adapter, view U, of 74D110314-1005 positive feed drilling machine.
 - n. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lock on collar (detail 177), view T, into (detail 174), view X, and rotating counterclockwise to engage lock bushing (detail 212), view S, with lock screw (detail 227), view S.
 - o. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.
 - p. Slide subassembly C aft fully engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.
 - q. Lock drive adapter (detail 178), view V, into groove by rotating clockwise.
 - r. Install correct cutter, refer to table 1.
 - s. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8 - inch from pin (detail 167), view J.
 - t. Inspect boring bar (details 117 and 119), view L, RE374320000-1, condition and cleanliness.
 - u. Lock boring bar (detail 117 and 119), view L, RE374320000-1, onto output shaft of offset drive.
 - v. Attach air hose to positive feed drilling machine and air supply.
 - w. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).
 - x. Machine bushing I.D./nominal or first oversize lug diameter.
 - y. Inspect bushing/lug I.D., refer to table 1.
- 9. Setting up to Machine I.D. of Bushing or Lug Location 3, Y488.000. See figure 7.**
- a. Location 3:
 - (1) Remove drift pin (detail 159).
 - (2) Install rotary bushing (detail 175), view A, and keeper (detail 228), view D.
 - (3) Install boring bar (details 104 and 117), view A, RE374320000, from forward side.
 - b. Location 1:
 - (1) Remove drift pin (detail 158)
 - (2) Install pin (detail 163), bushing I.D.; detail 180, nominal lug I.D.; or (detail 240), first oversize lug I.D.), view B, and jam nuts (detail 183), view C.
 - (3) Secure in position with hex bolt (detail 207), 1-8X2 LG, view A and washer (detail 187), view A.
 - c. Install subassembly C, figure 5, view L, using rods (detail 147), view M, and handle (detail 153), view N.
 - d. Secure rods (detail 147), view M, in position using set screws (detail 208), 4 places, and swing "C" washers (detail 209), 2 places, view P.
 - e. Attach boring bars (details 117 and 119), view L, RE374320000, onto forward and aft sides of output shaft (detail 139), view L, of subassembly C offset drive.
 - f. Attach lock on collar (detail 177), view T, and bushing (detail 212), view S, to adapter (detail 176), view U.
 - g. Thread adapter (detail 176), view U, onto positive feed drilling machine, 74D110314-1005, view R.
 - h. Slide subassembly C, view L, forward on rods (detail 147), view M.
 - i. Install drive adapter (detail 178), view V, onto threaded spindle adapter, view S, of 74D110314-1005 positive feed drilling machine.

j. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lock on collar (detail 177), view T, into (detail 174), view X, and rotating counterclockwise to engage lock bushing (detail 212), view S, with lock screw (detail 227), view S.

k. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.

l. Slide subassembly C aft fully engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.

m. Lock drive adapter (detail 178), view V, into groove by rotating clockwise.

n. Install correct cutter, refer to table 1.

o. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8 - inch from pin (detail 167), view J, (details 104 and 117) RE374320000-1.

p. Inspect boring bar condition and cleanliness.

q. Lock boring bar onto output shaft of offset drive.

r. Attach air hose to positive feed drilling machine and air supply.

s. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).

t. Machine bushing I.D./nominal or first oversize lug diameter.

u. Inspect bushing/lug I.D., refer to table 1.

10. Setting up to Machine I.D. of Any Bushing or Lug Hole in Lower Row. See figure 8.

a. Location 2:

(1) Install pin (detail 164), bushing I.D.; detail 205, nominal lug I.D.; or detail 231, first oversize lug I.D.), view B.

(2) Install jam nuts (details 183 and 185), 4 places, view C, pilot bushing (detail 188), view D.

(3) Secure in position using flat washers (detail 187), view E, and hex bolts (details 206, 1/2-13X2 LG, and 207, 1-8X2 LG), view A.

b. Location 3:

(1) Remove drift pin (detail 159).

(2) Install pin (detail 166), bushing I.D.; detail 203, nominal lug I.D.; or detail 233, first oversize lug I.D., view F.

(3) Install jam nuts (detail 185), view C, 2 places, and pilot bushing (detail 189), view D.

(4) Secure with hex bolt (detail 206), 1/2-13X2 LG, view A.

c. Location 1:

(1) Remove drift pin (detail 158).

(2) Install pin (detail 163, bushing I.D.; detail 180, nominal lug I.D.; or detail 240, first oversize lug I.D.), view G.

(3) Install jam nuts (detail 183), view C, 2 places.

(4) Secure with hex bolt (detail 207), 1-8x2 LG, view A, and washer (detail 187), view E.

11. Setting up to Machine Bushing or Lug Location 4, Y453.000. See figure 9.

a. Location 6:

(1) Remove drift pin (detail 161, bushing I.D.; or detail 219, nominal lug I.D.).

(2) Install pin (detail 172, bushing I.D.; detail 197, nominal lug I.D.; or detail 239, first oversize lug I.D.), view B.

(3) Install pilot bushing (detail 191), view C, and 2 jam nuts (detail 182), view D.

(4) Secure with hex bolt (detail 206), 1/2-13X2 LG, view A.

b. Location 5:

(1) Attach pin (detail 170, bushing I.D.; detail 200, nominal lug I.D.; or detail 236, first oversize lug), view E, using handle (detail 154), view L. Slide pin (detail 170), view E, through assembly from aft side engaging jam nut (detail 195), view F, bulkhead and jam nut (detail 195), view F.

(2) Install rotary bushing (detail 175), view A.

(3) Install keeper (details 229), view G.

c. Location 4:

(1) Remove drift pin (detail 160, bushing I.D. or detail 218, lug I.D.).

(2) Install rotary bushing (detail 175), view A, and keeper (detail 230), view G.

d. Install subassembly C, view H, using rods (detail 147), view J.

e. Secure rods (detail 147), view J, in position using set screws (detail 208), 4 places, and swing “C” washers (detail 209), view K, 2 places.

f. Install 2 piece boring bar (detail 117 and 119) RE374320000 tool set, from forward side, sliding onto output shaft (detail 139), figure 5, view L, of subassembly C offset drive.

g. Install lock on collar (detail 177), view T, and bushing (detail 212), view S, to adapter (detail 176), view U.

h. Thread adapter (detail 176), view U, onto positive feed drilling machine, view R, 74D110314-1005.

i. Slide subassembly C, view L, forward on rods (detail 147), view M.

j. Install drive adapter (detail 178), view V, onto spindle adapter, view S, of 74D110314-1005 positive feed drilling machine.

k. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lock on collar (detail 177), view T, into (detail 174), view X, and rotating counterclockwise to engage lock bushing (detail 212), view S, with lock screw (detail 227), view S.

l. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.

m. Slide subassembly C aft, fully engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.

n. Lock drive adapter (detail 178), view V, into groove by rotating clockwise.

o. Install correct cutter, refer to table 1.

p. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8 - inch from drift pin (detail 167), view J.

q. Inspect boring bar (details, 117 and 119), condition and cleanliness.

r. Lock boring bar (detail 117), view L, RE374320000, tool set onto output shaft of offset drive.

s. Attach air hose to positive feed drilling machine.

t. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).

u. Machine bushing I.D./nominal or first oversize lug I.D.

v. Inspect bushing I.D./lug I.D., refer to table 1.

12. Setting up to Machine Bushing or Lug at Location 5, Y470.500. See figure 10.

a. Location 4:

(1) Remove drift pin (detail 160).

(2) Install drift pin (detail 168, bushing I.D.; detail 202, nominal lug I.D.; or detail 234, first oversize lug I.D.), view B.

(3) Install rotary bushing (detail 175), view A, jam nut (detail 195), view C, and keeper (detail 230), view D.

b. Location 6:

(1) Remove drift pin (detail 161).

(2) Install drift pin (detail 172, bushing I.D.; detail 197, nominal lug I.D.; or detail 239, first oversize lug I.D.), view E.

(3) Install 2 jam nuts (detail 182), view F, and pilot bushing (detail 191), view G.

(4) Secure in position with hex bolt (detail 206), 1/2-13x2 LG, view A.

c. Location 5:

(1) Install 2 rotary bushings (detail 175), view A, and 2 keepers (detail 229), view D.

(2) Install subassembly C, figure 5, view L, using rods (detail 147), view M.

(3) Secure rods (detail 147) in position using set screws (detail 208) and swing “C” washers (detail 209).

d. Install 2 piece boring bar (detail 117 and 119) RE374320000 tool set, from forward side.

e. Install lock on collar (detail 177), view T, and bushing (detail 212), view S, to adapter (detail 176), view U.

f. Thread adapter (detail 176), view U, onto positive feed drilling machine, view R, 74D110314-1005.

g. Slide subassembly C, view L, on rods (detail 147), view M.

h. Install drive adapter (detail 178), view V, onto threaded spindle adapter, view S, of 74D110314-1005 positive feed drilling machine.

i. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lock on collar (detail 177), view T, into (detail 174), view X, and rotating counterclockwise to engage lock bushing (detail 212), view S, with lock screw (detail 277), view S.

j. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.

k. Slide subassembly C aft, fully, engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.

l. Lock drive adapter (detail 178), view V, into groove by rotating clockwise.

m. Install correct cutter, refer to table 1.

n. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8-inch from drift pin (detail 172), figure 10, view E.

o. Inspect boring box (details 117 and 119), view A, condition and cleanliness.

p. Lock boring bar (detail A), figure 5, view A, onto output shaft of offset drive.

q. Attach air hose to positive feed drilling machine.

r. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).

s. Machine bushing I.D./nominal or first oversize lug I.D.

t. Inspect bushing I.D./lug I.D., refer to table 1.

13. Setting up to Machine Bushing or Lug Location 6, Y488.000. See figure 11.

a. Location 5:

(1) Install guide tube (detail 170, bushing I.D., detail 200, nominal lug I.D.; or detail 236, first oversize lug I.D.), view B.

(2) Install 2 rotary bushings (detail 175), view A.

(3) Install keeper (detail 229), view D.

b. Location 6:

(1) Install rotary bushing (detail 175), view A, and keeper (detail 228), view D.

(2) Install 2 piece boring bar (details 115 and 117), RE374320000 tool set, from forward side, view A.

c. Location 4:

(1) Remove drift pin (detail 160).

(2) Install pin (detail 169, bushing I.D.; detail 201, nominal lug I.D.; or detail 235, first oversize lug I.D.), view E.

(3) Install 2 jam nuts (detail 184), view F and flat washer (detail 187), view G.

(4) Secure using hex bolt (detail 207), 1-8x2 LG, view A.

d. Install subassembly C, figure 9, view H, using rods (detail 147), view J. Secure rods using set screws (detail 208), 4 places, view A, and swing “C” washers (detail 209), view A.

e. Attach boring bars (details 115 and 117), figure 11, view A. RE374320000, onto forward and

aft sides of output shaft (detail 139), view A, of subassembly C offset drive.

f. Install lock on collar (detail 177), figure 5, view T, and bushing (detail 212), view S, to adapter (detail 176), view U.

g. Thread adapter (detail 176), view U, onto positive feed drilling machine, view R, 74D110314-1005.

h. Slide subassembly C, view L, forward on rods (detail 147), view M.

i. Install drive adapter (detail 178), view V, onto threaded spindle adapter, view S, of 74D110314-1005 positive feed drilling machine.

j. Install 74D110314-1005 positive feed drilling machine, view R, onto RE174110000 assembly by inserting lock on collar (detail 177), view T, into (detail 174), view X, and rotating counterclockwise to engage lock bushing (detail 212) view S, with lock screw (detail 227), view S.

k. With both drive motors away from nacelle, manually advance spindle of positive feed drilling machine by turning hand wheel.

l. Slide subassembly C aft, fully engaging drive adapter (detail 178), view V, into hollow shaft (detail 140), view Y.

m. Lock drive adapter (detail 178), view Y, into groove by rotating clockwise.

n. Install correct cutter, refer to table 1.

o. Turn hand wheel on positive feed drilling machine to retract offset drive of subassembly C to 3/8-inch from drift pin (detail 167), view J.

p. Inspect boring bar (details 115 and 117), figure 11, view A, condition and cleanliness.

q. Lock boring bar (details 115 and 117, view A, onto output shaft of offset drive.

r. Attach air hose to positive feed drilling machine.

s. Set up spray mist coolant tank (A1-F18AC-SRM-200, WP004 16).

t. Machine bushing I.D./nominal or first oversize lug I.D.

u. Inspect bushing I.D./lug I.D., refer to table 1.

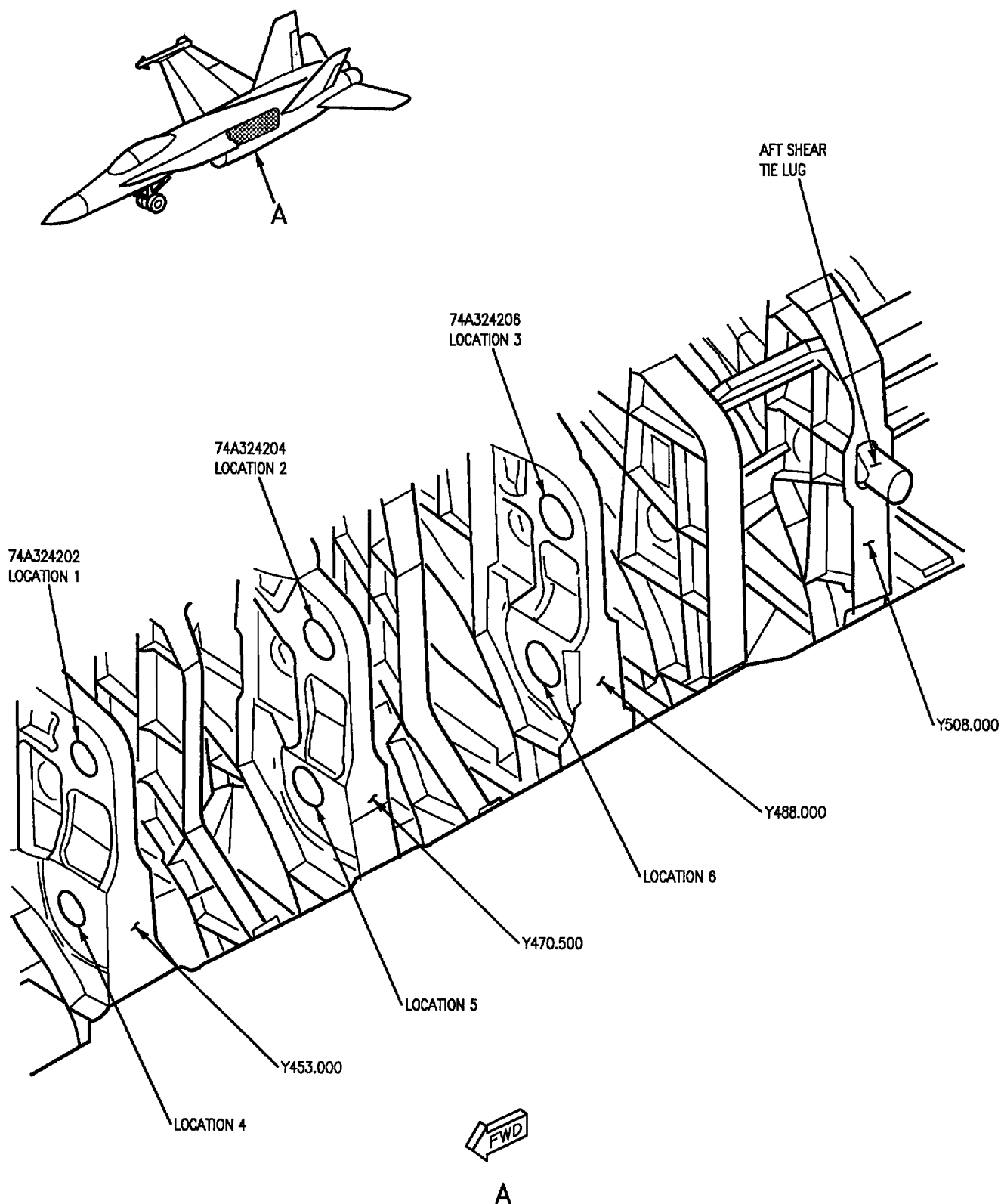
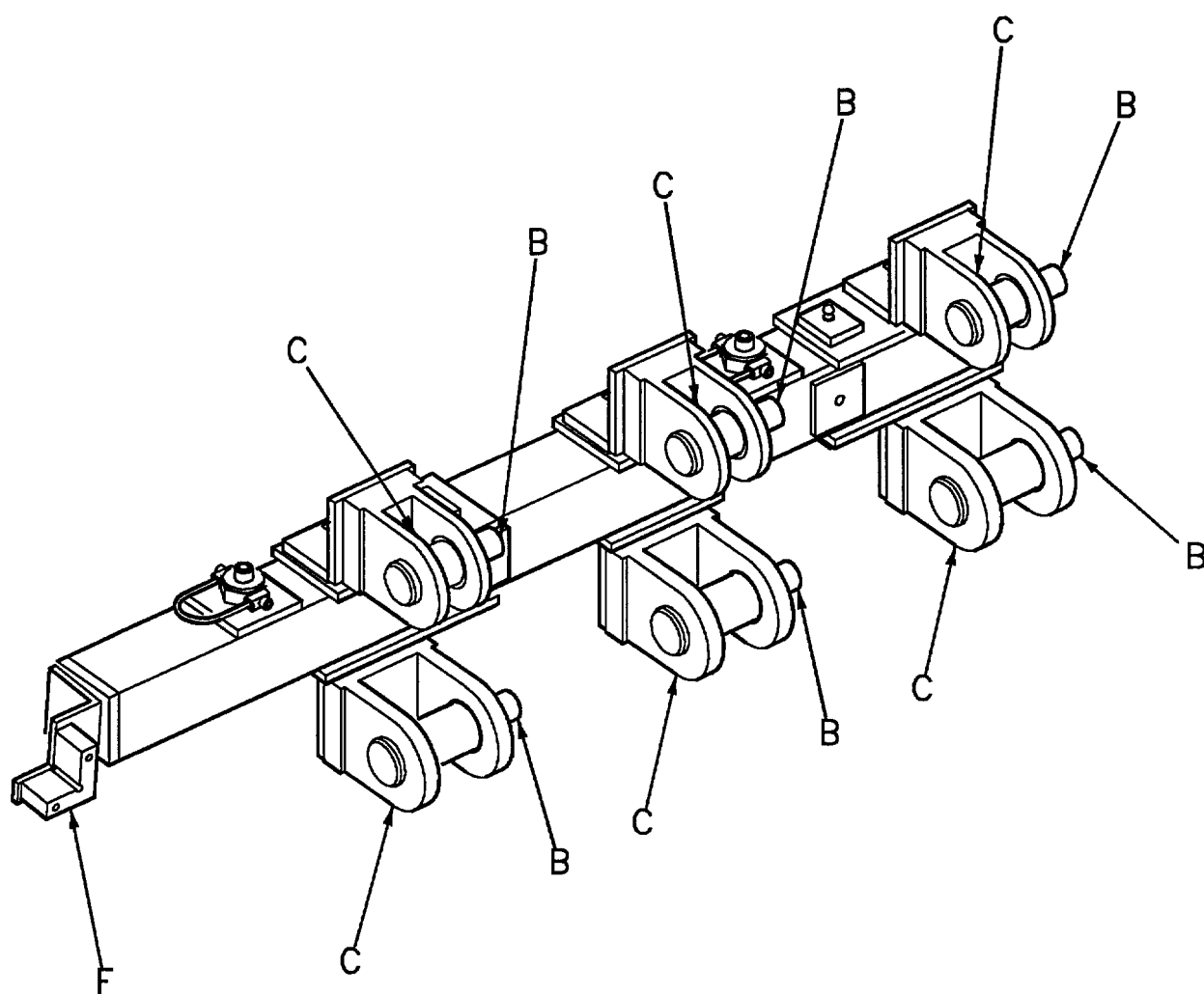


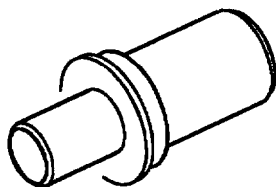
Figure 1. Location of Center Fuselage Wing Attach Lugs



RE174110000-S-A
SUBASSEMBLY A

A

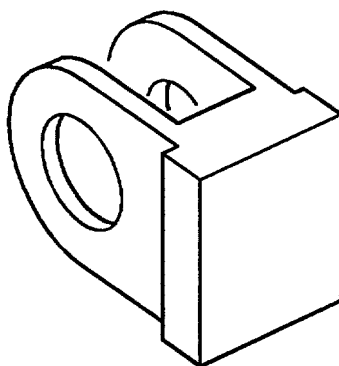
Figure 2. Inspection Procedure Tools (Sheet 1)



INDEX	LUGS	I.D.
103	UPPER	BUSHING I.D.
113	LOWER	BUSHING I.D.
222	UPPER	NOM. LUG I.D.
223	LOWER	NOM. LUG I.D.
224	LOWER	FIRST OVS LUG I.D.
225	UPPER	FIRST OVS LUG I.D.

DRIFT PINS

B

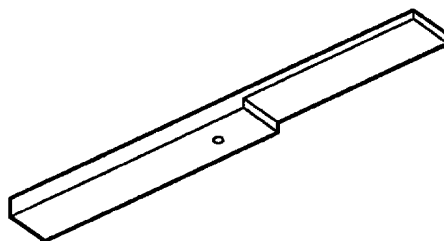


INDEX	BULKHEAD	ROW
107	Y453.000	UPPER
106	Y470.500	UPPER
101	Y488.000	UPPER
111	Y453.000	LOWER
112	Y470.500	LOWER
115	Y488.000	LOWER

CLEVIS

C

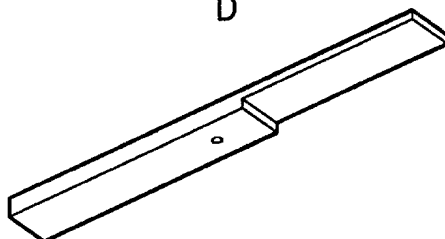
Figure 2. Inspection Procedure Tools (Sheet 2)



INDEX	BULKHEAD USED ON	BULKHEAD SIDE	BULKHEAD ATTACH HOLE
108	Y453.000/Y488.000	FORWARD/AFT	UPPER
109	Y470.500	FORWARD/AFT	UPPER
110	Y453.000/Y488.000	FORWARD/AFT	LOWER
119	Y470.500	FORWARD	LOWER

GO-NO GO
GAGE

D



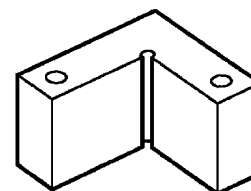
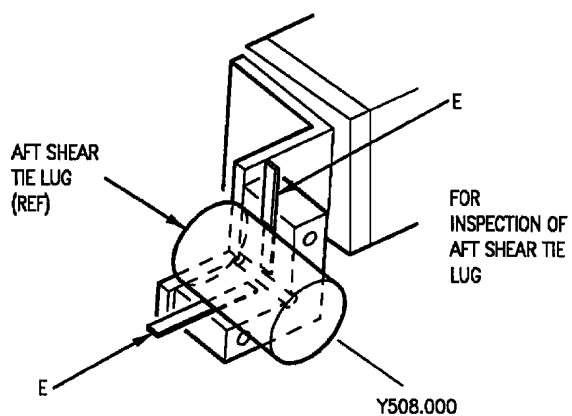
INDEX	SHEAR TIE LUG	GAP
243 1	Y508.000	VERTICAL/HORIZONTAL
244	Y508.000	VERTICAL
245	Y508.000	HORIZONTAL

LEGEND

1 NOMINAL THICKNESS GAGE

GO-NO GO
GAGE

E



F

Figure 2. Inspection Procedure Tools (Sheet 3)

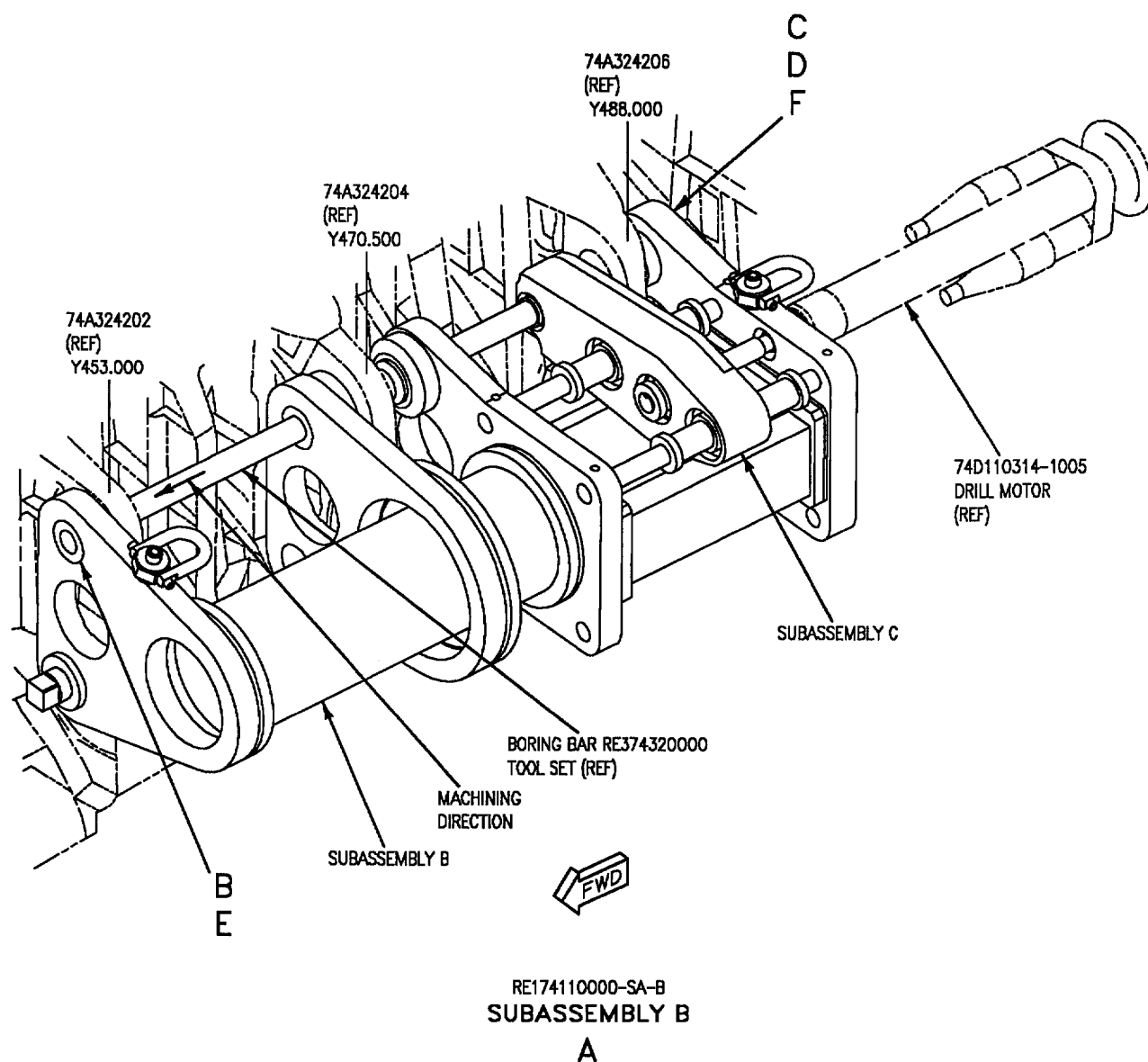
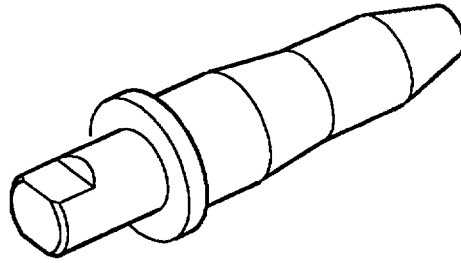
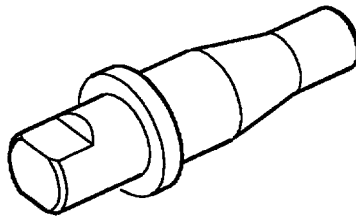


Figure 3. Machining Wing Attach Lugs/Bushings I.D. (Sheet 1)



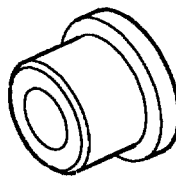
INDEX	BULKHEAD	HOLE
158	74A324202	UPPER
216	74A324202	UPPER

DRIFT PIN
B



INDEX	BULKHEAD	HOLE
159	74A324206	UPPER
217	74A324206	UPPER

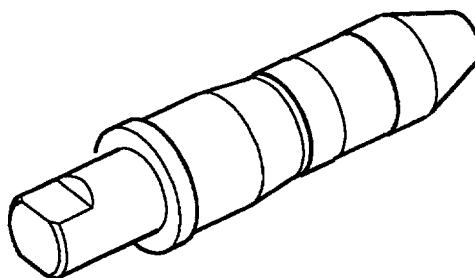
DRIFT PIN
C



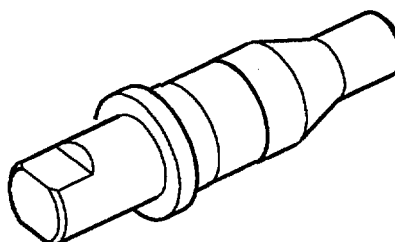
RE174110000-189

PILOT BUSHING
D

Figure 3. Machining Wing Attach Lugs/Bushings I.D. (Sheet 2)



INDEX	BULKHEAD	HOLE
160	74A324202	LOWER
218	74A324202	LOWER

DRIFT PIN
E

INDEX	BULKHEAD	HOLE
161	74A324206	LOWER
219	74A324206	LOWER

DRIFT PIN
F

Figure 3. Machining Wing Attach Lugs/Bushings I.D. (Sheet 3)

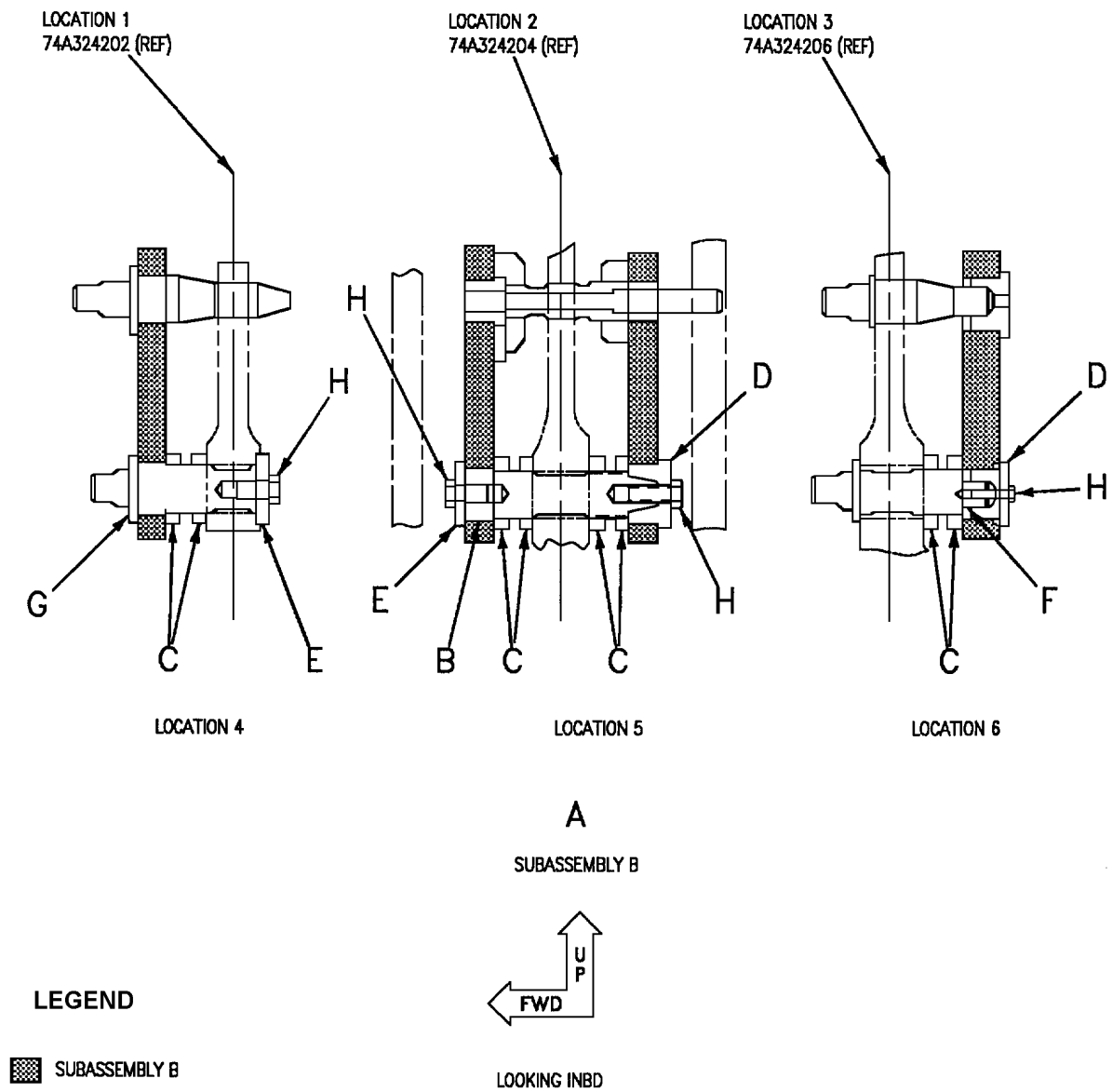
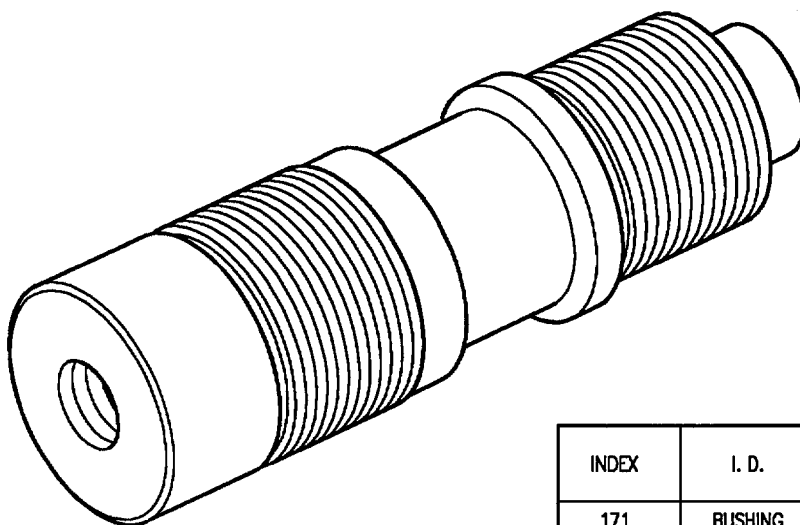


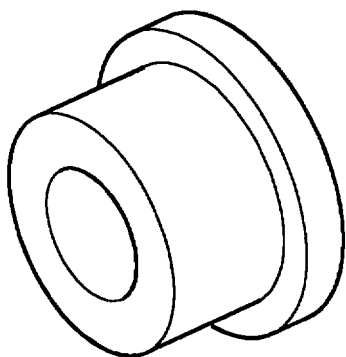
Figure 4. Setting Up to Machine I.D. of Any Bushing or Lug Hole in Upper Row (Sheet 1)



INDEX	I. D.
171	BUSHING
199	NOMINAL LUG
237	FIRST OVS. LUG

PIN

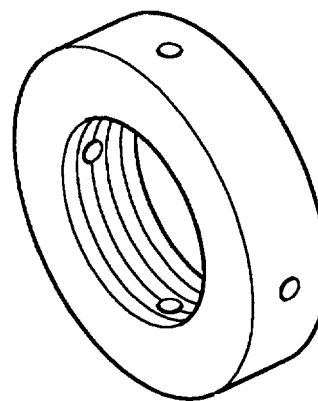
B



INDEX	LOCATION
188	5
189	6

PILOT BUSHING

D

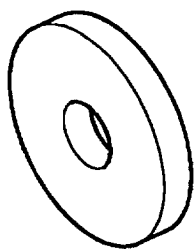


INDEX	LOCATION
184	4
186	5 AFT /6
183	5 FORWARD

JAM NUT

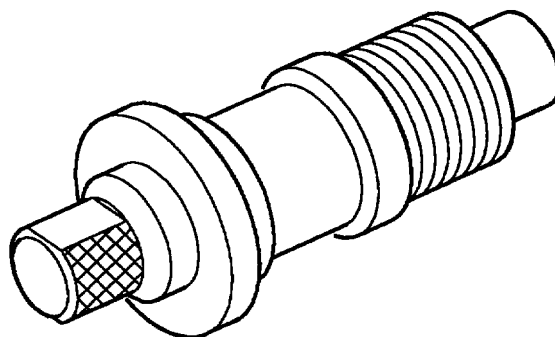
C

Figure 4. Setting Up to Machine I.D. of Any Bushing or Lug Hole in Upper Row (Sheet 2)



RE174110000-187 WASHER

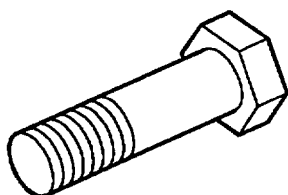
E



INDEX	I.D.
173	BUSHING
198	NOMINAL LUG
238	FIRST OVS. LUG

PIN

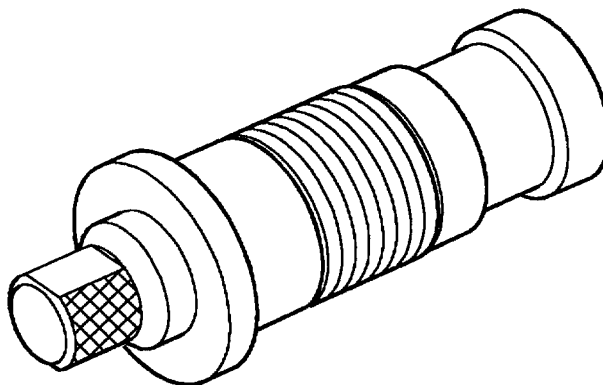
F



INDEX	LOCATION
206	5 AFT /6
207	4/5 FWD

HEX BOLT

H

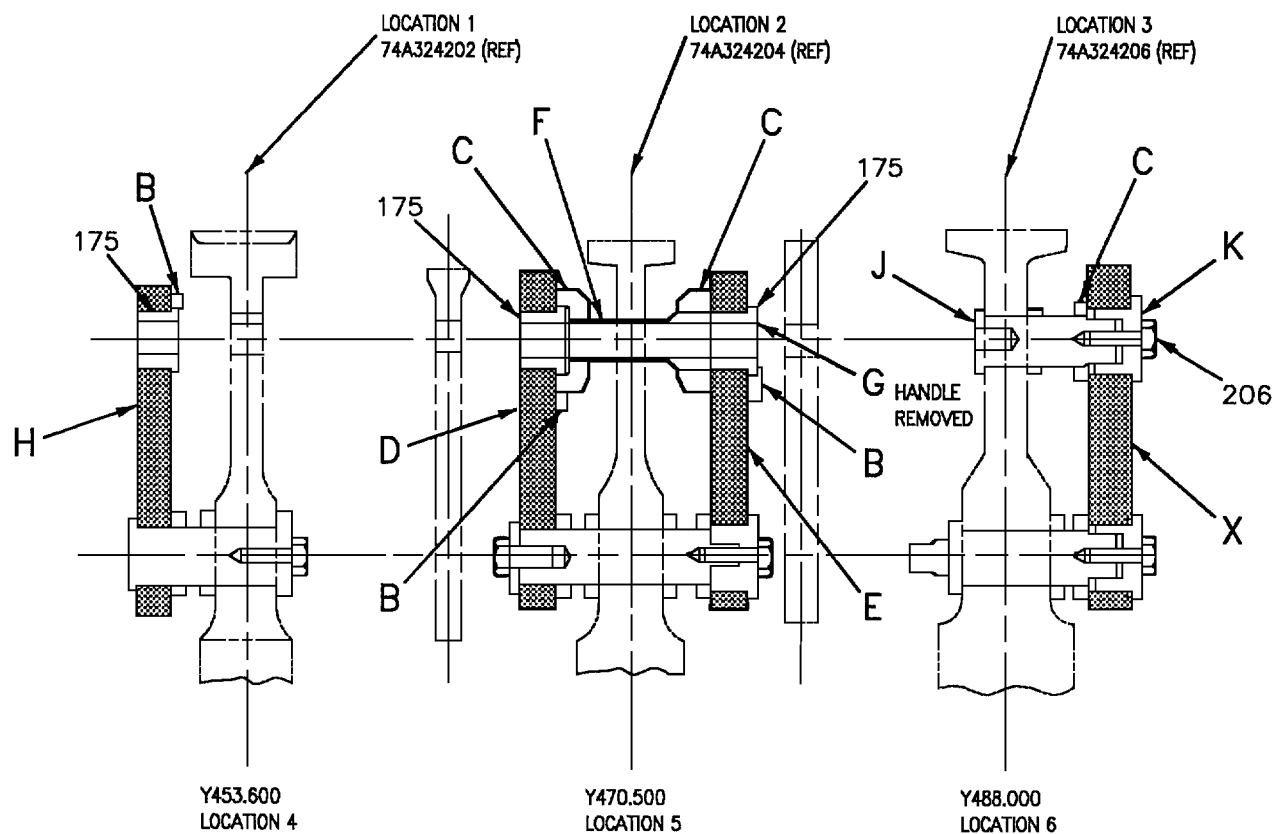


INDEX	I.D.
169	BUSHING
201	NOMINAL LUG
235	FIRST OVS. LUG

PIN

G

Figure 4. Setting Up to Machine I.D. of Any Bushing or Lug Hole in Upper Row (Sheet 3)



LEGEND

SUBASSEMBLY B
 SUBASSEMBLY C

BODY OF SUBASSEMBLY B REMOVED FOR CLARITY

SET UP TO MACHINE LOCATION 1

LOOKING INBOARD

A

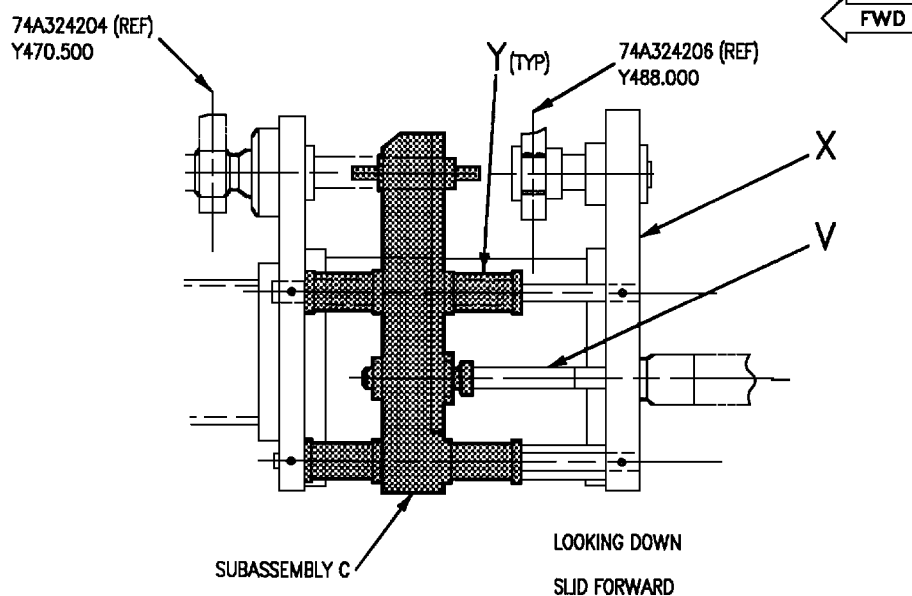
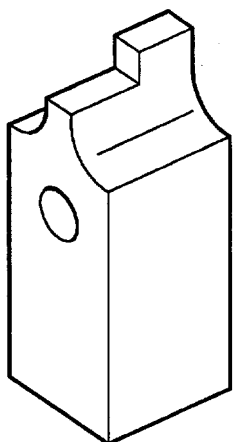


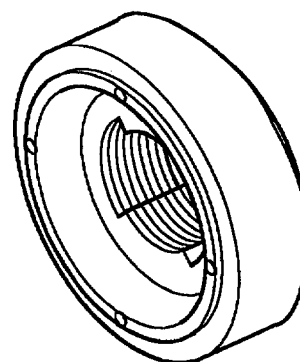
Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1, Y453.000 (Sheet 1)



INDEX	LOCATION
230	2 FWD
229	1/2 AFT/FWD

KEEPER

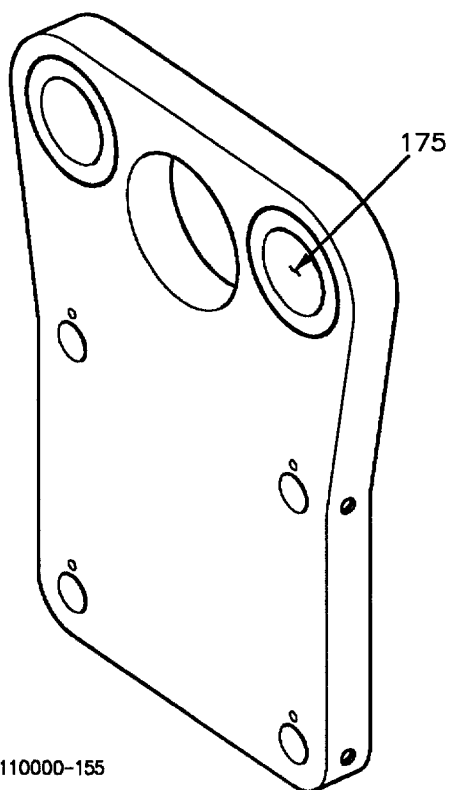
B



INDEX	LOCATION
194	2 FWD
185	3
196	2 AFT

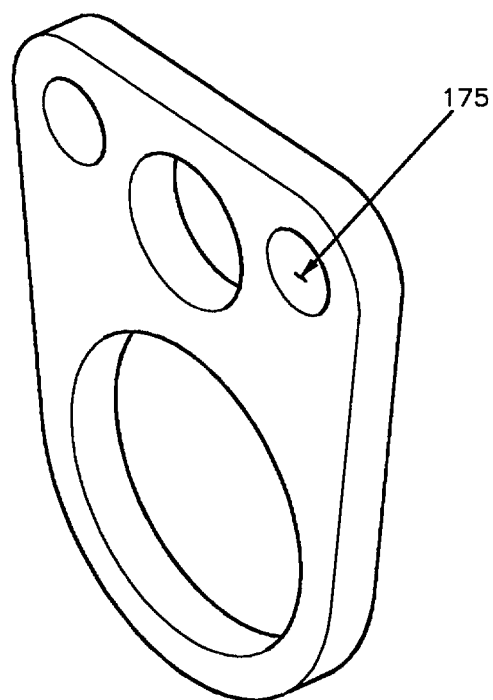
JAM NUTS

C



RE174110000-155

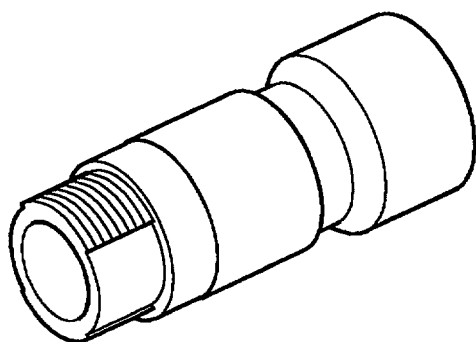
E



RE174110000-156

D

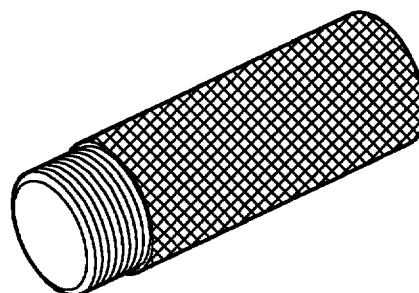
Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1,
Y453.000 (Sheet 2)



INDEX	LOCATION
165	2
181	3
242	2

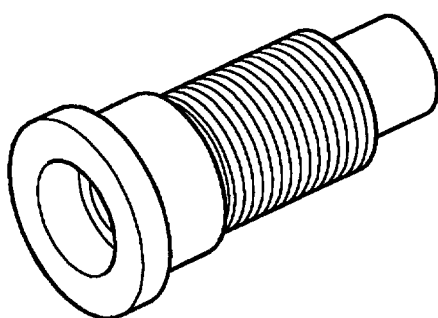
GUIDE TUBE

F



RE174110000-154
HANDLE

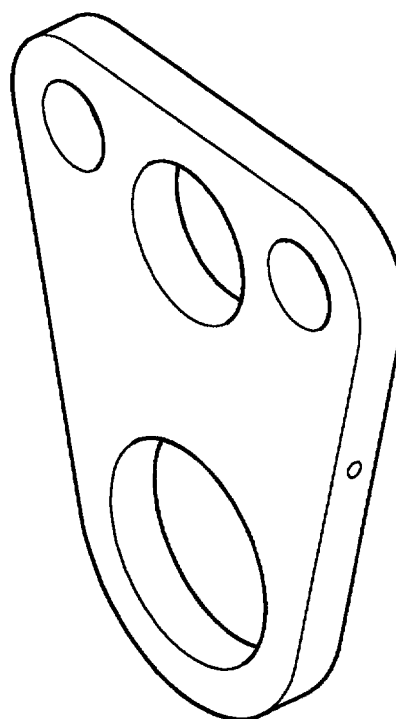
G



INDEX	LOCATION
167	3
204	3
232	3

PIN

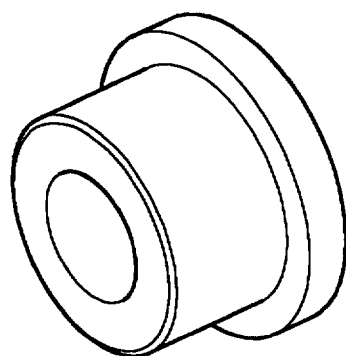
J



RE174110000-157

H

Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1,
Y453.000 (Sheet 3)



RE174110000-189

PILOT BUSHING

K

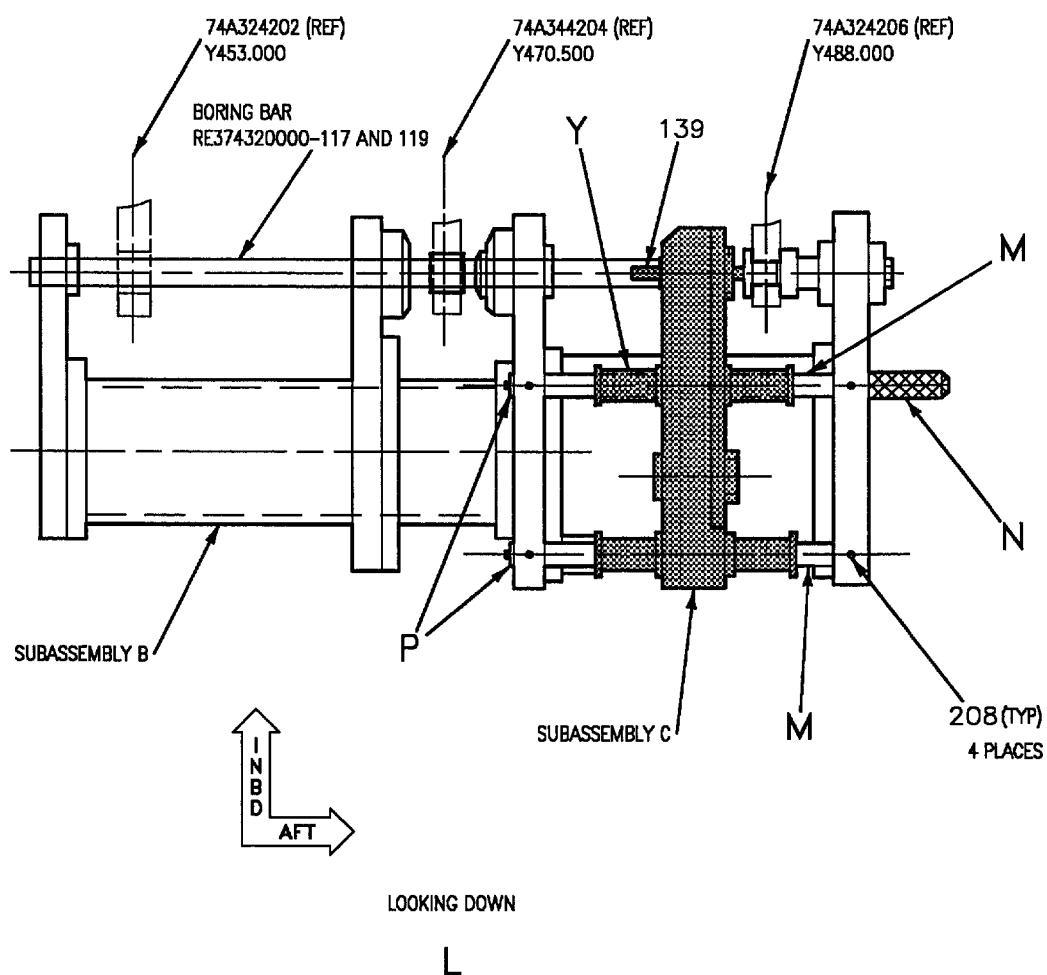
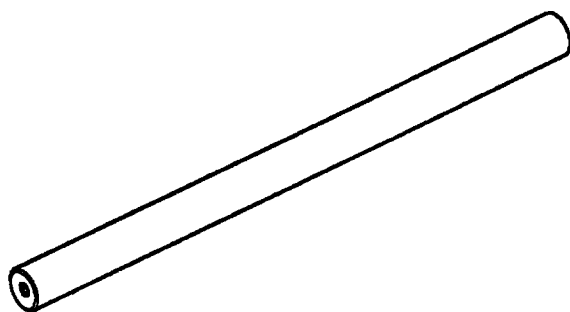


Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1,
Y453.000 (Sheet 4)

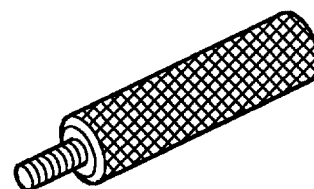
03700504



RE174110000-147

ROD

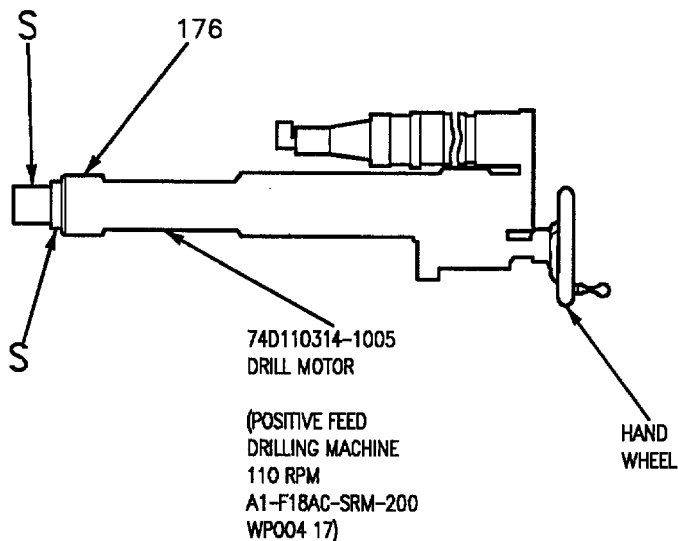
M



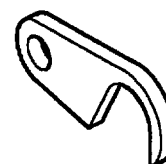
RE174110000-153

HANDLE

N



R



RE174110000-209

SWING "C" WASHER

P

Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1, Y453.000 (Sheet 5)

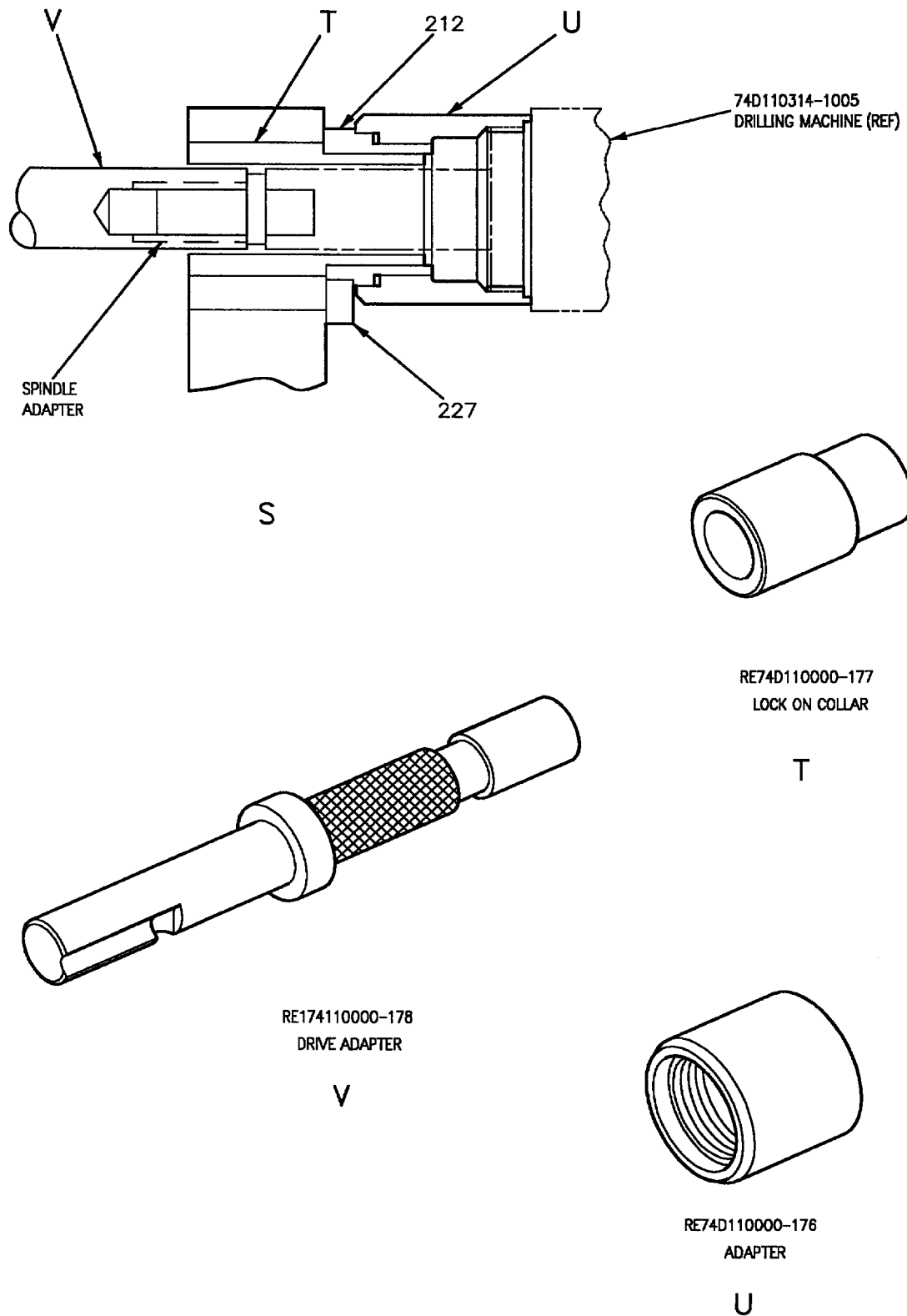
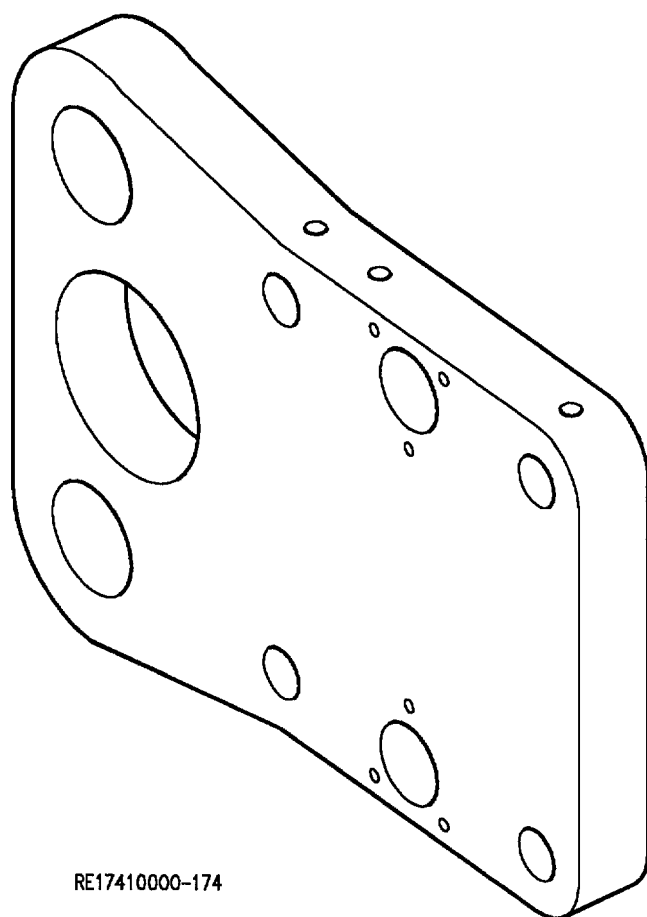
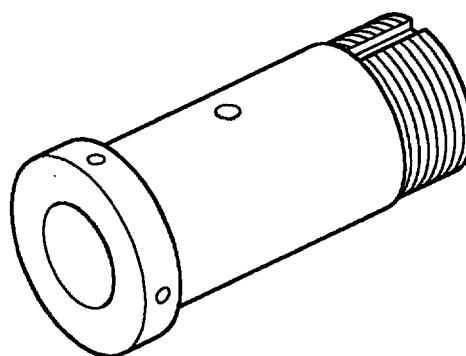


Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1, Y453.000 (Sheet 6)



X



HOLLOW SHAFT

Y

Figure 5. Setting Up to Machine I.D. of Bushing or Lug at Location 1,
Y453.000 (Sheet 7)

03700507

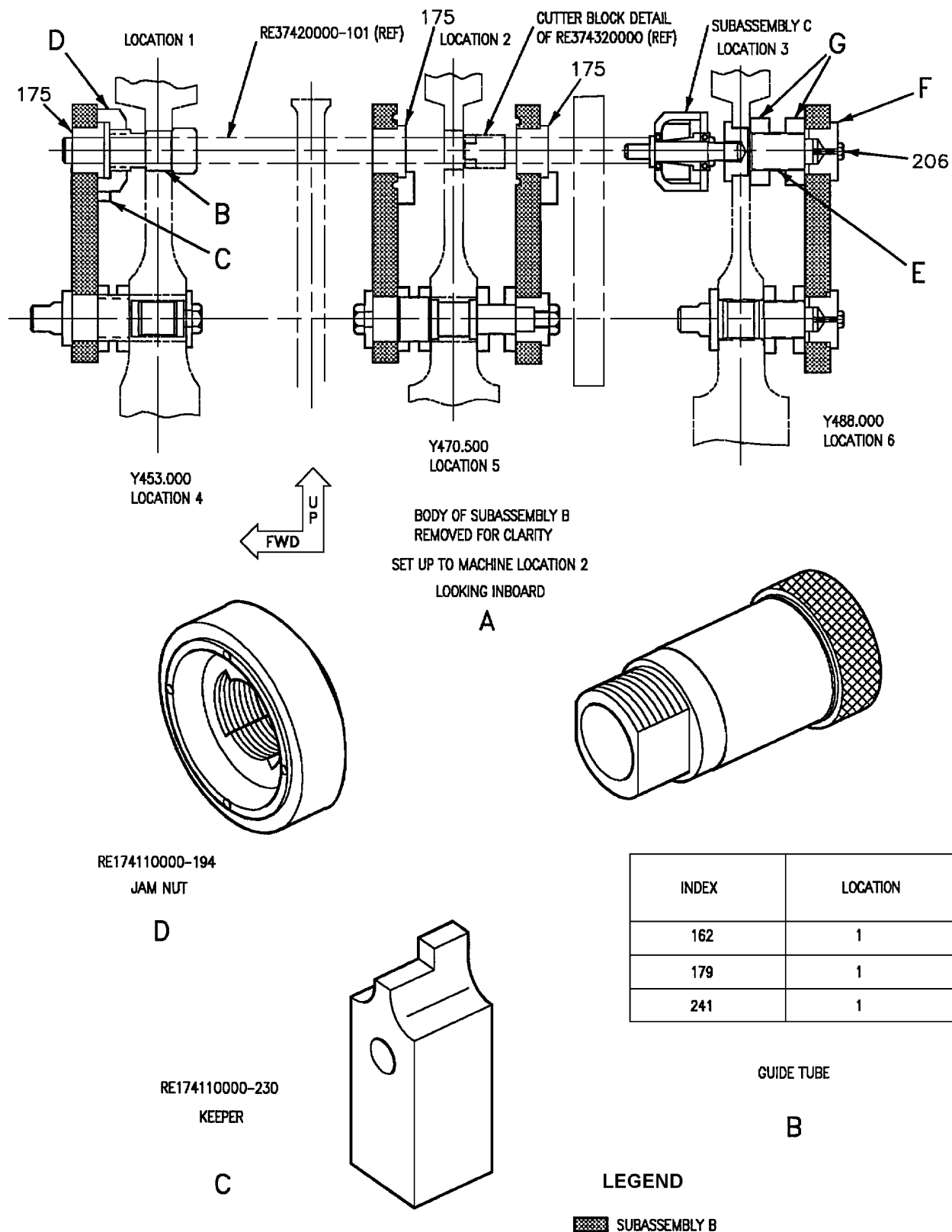
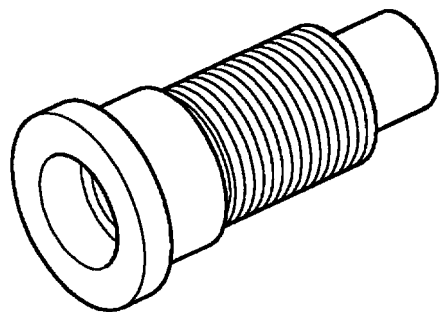


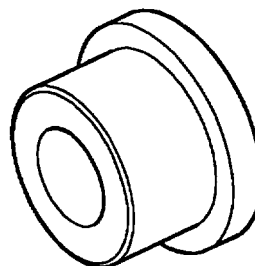
Figure 6. Setting Up to Machine I.D. of Bushing or Lug at Location 2, Y470.500 (Sheet 1)



INDEX	LOCATION
167	3
204	3
232	3

PIN

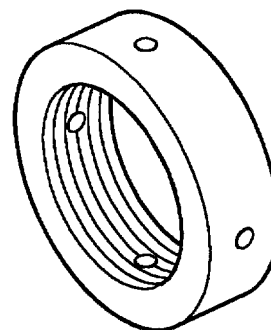
E



RE174110000-189

PILOT BUSHING

F



RE174110000-185

JAM NUT

G

Figure 6. Setting Up to Machine I.D. of Bushing or Lug at Location 2,
Y470.500 (Sheet 2)

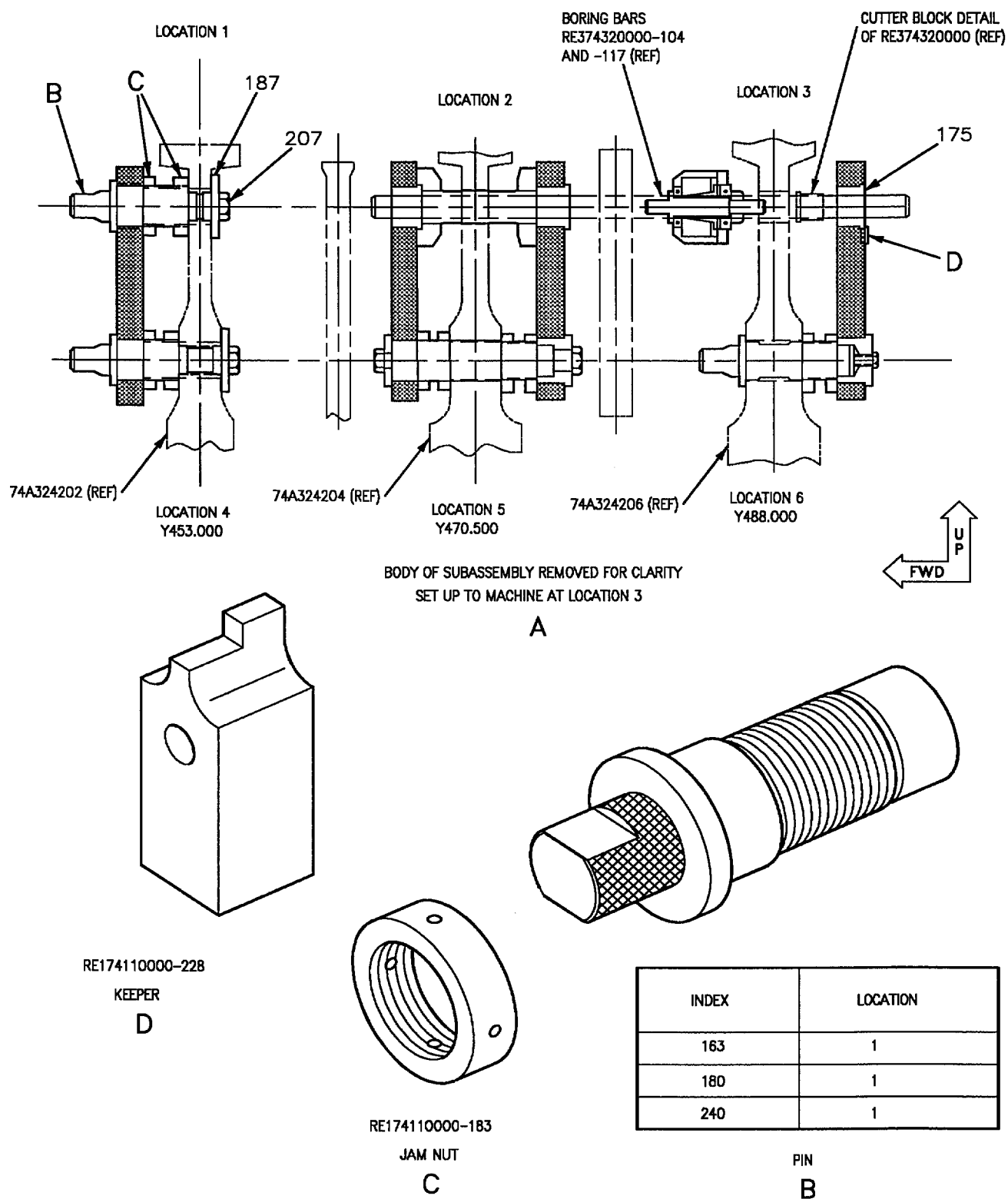
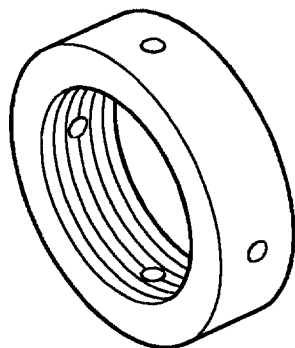
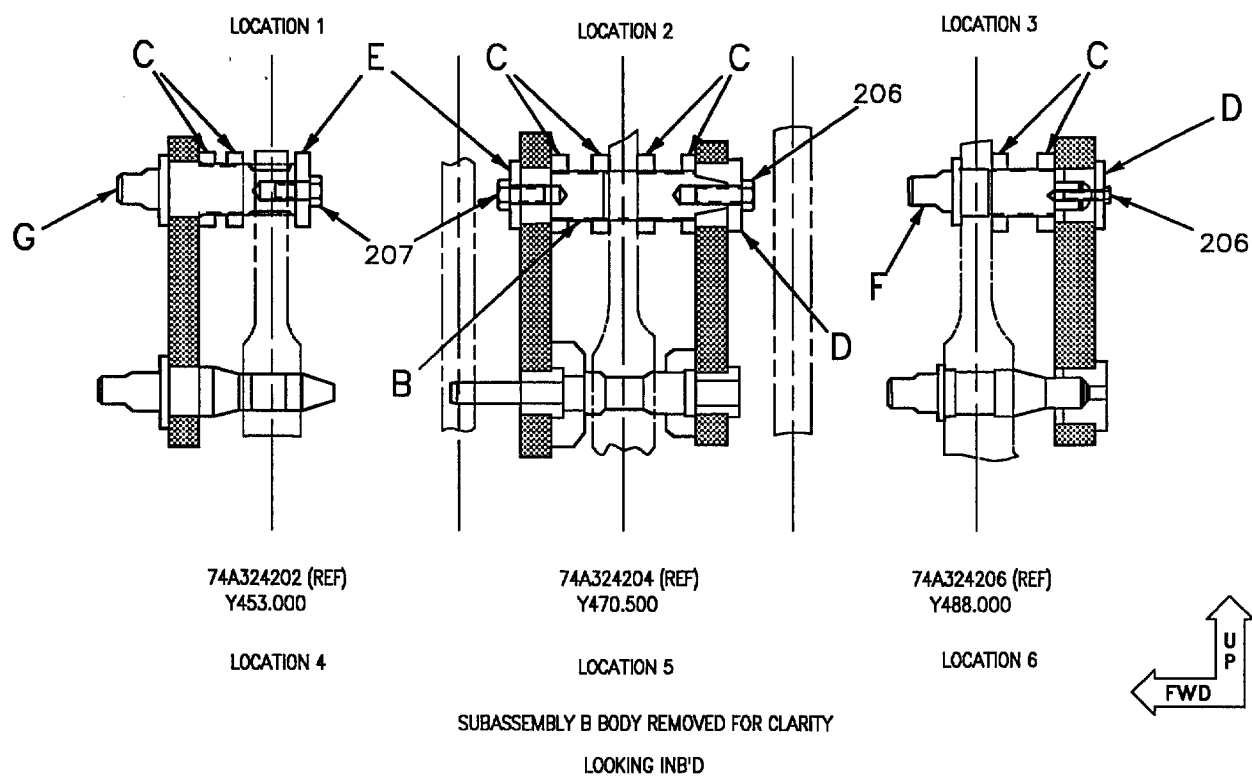


Figure 7. Setting Up to Machine I.D. of Bushing or Lug at Location 3, Y488.000

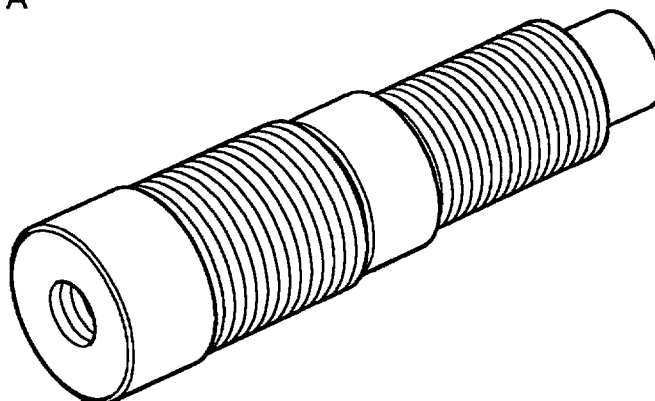
037007



INDEX	LOCATION
183	2 FWD
185	2 AFT

JAM NUTS

C



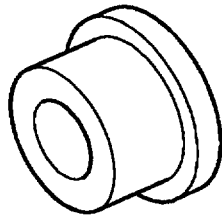
INDEX	I. D.
164	NOM BUSHING
205	NOM LUG
231	FIRST OVS. LUG

PIN

B

Figure 8. Setting Up to Machine I.D. of Any Bushing or Lug Hole in Lower Row (Sheet 1)

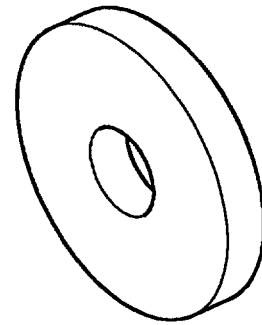
03700801



INDEX	LOCATION
188	2
189	3

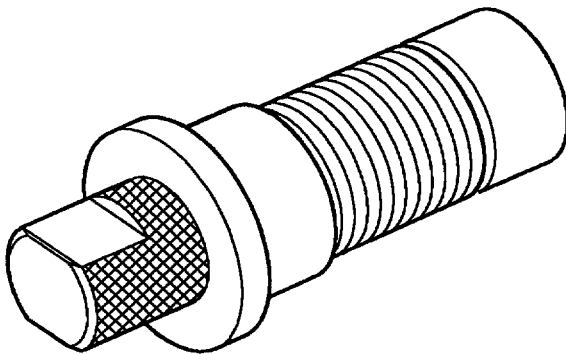
PILOT BUSHING

D



RE174110000-187 WASHER

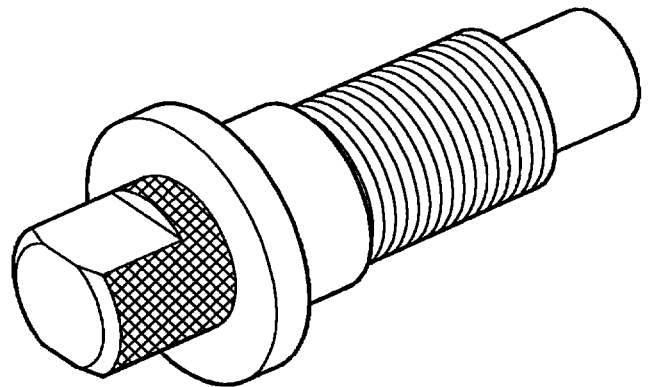
E



INDEX	LOCATION
163	NOMINAL BUSHING
180	NOMINAL LUG
240	FIRST OVS. LUG

PIN

G

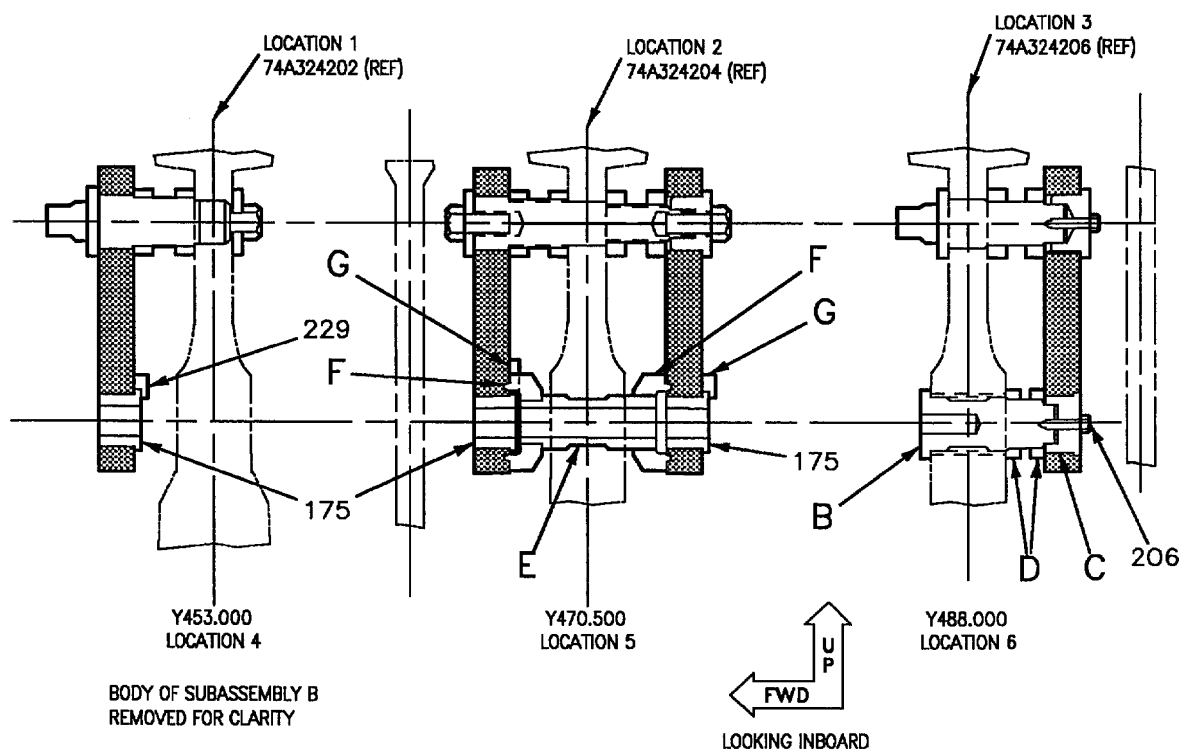


INDEX	I.D.
166	NOM BUSHING
203	NOMINAL LUG
233	FIRST OVS. LUG

PIN

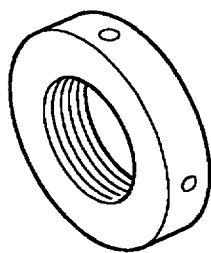
F

Figure 8. Setting Up to Machine I.D. of Any Bushing or Lug Hole in Lower Row (Sheet 2)

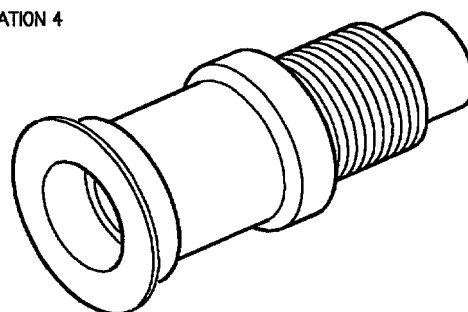


SET UP TO MACHINE AT LOCATION 4

A

RE174110000-182
JAM NUT

D

RE174110000-191
PILOT BUSHING

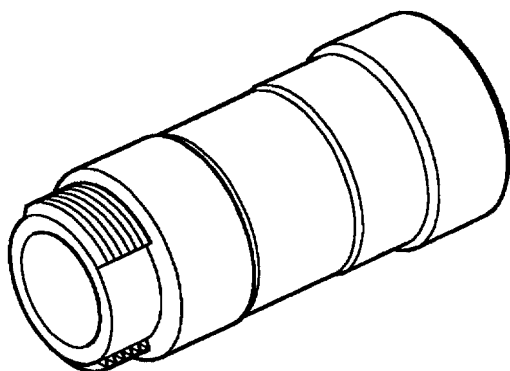
C

INDEX	I.D.
172	BUSHING
197	NOMINAL LUG
239	FIRST OVS LUG

PIN

B

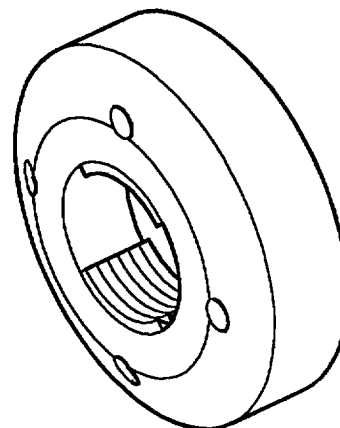
Figure 9. Setting Up to Machine I.D. of Bushing or Lug at Location 4, Y453.000 (Sheet 1)



INDEX	I.D.
170	BUSHING
200	NOMINAL LUG
236	FIRST OVS LUG

PIN

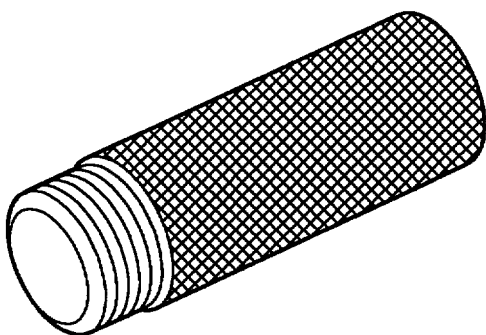
E



RE174110000-195

JAM NUT

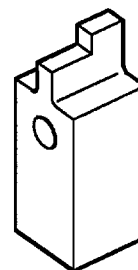
F



RE174110000-154

HANDLE

L



INDEX	LOCATION
229	4/5
230	5

KEEPER

G

Figure 9. Setting Up to Machine I.D. of Bushing or Lug at Location 4,
Y453.000 (Sheet 2)

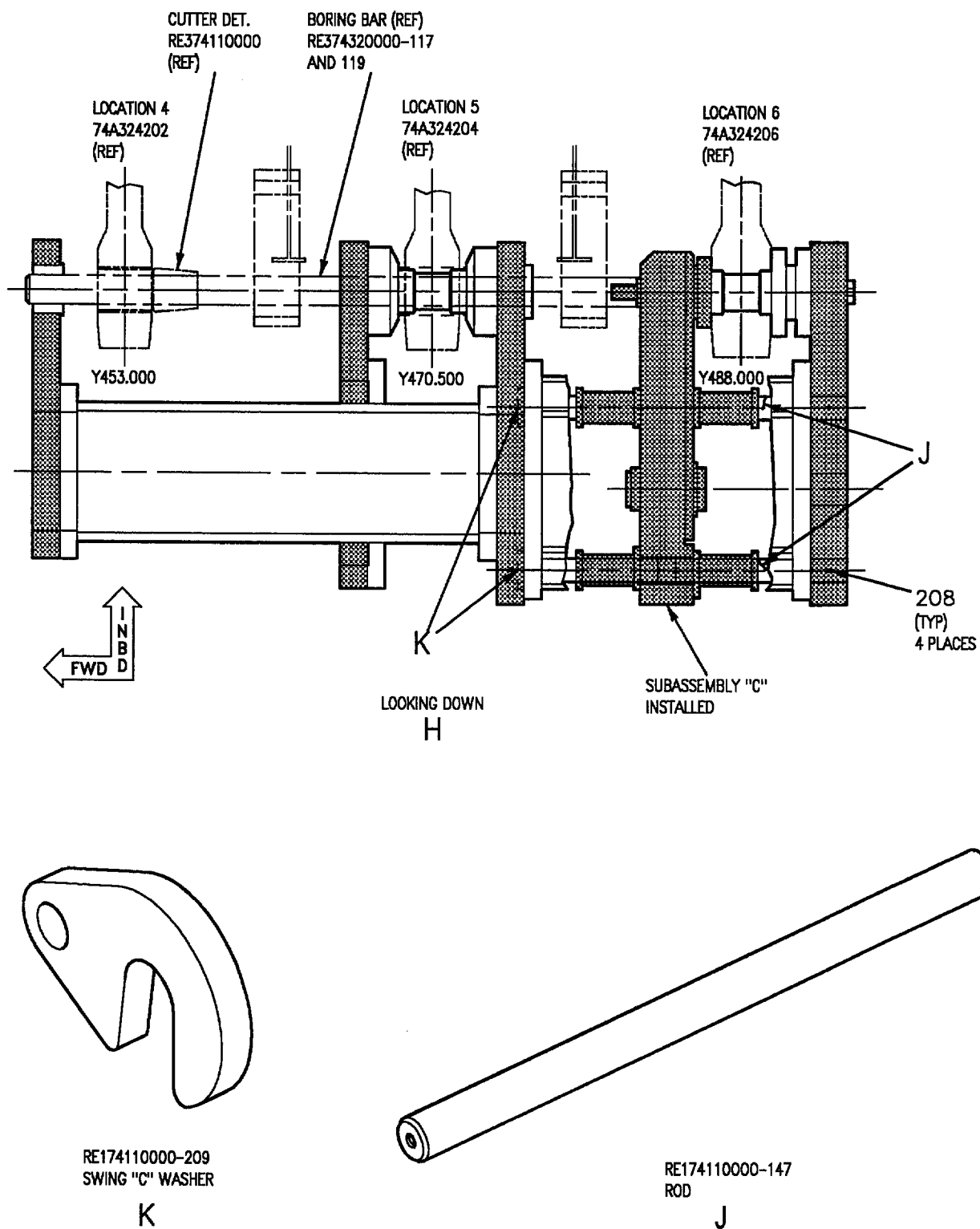


Figure 9. Setting Up to Machine I.D. of Bushing or Lug at Location 4, Y453.000 (Sheet 3)

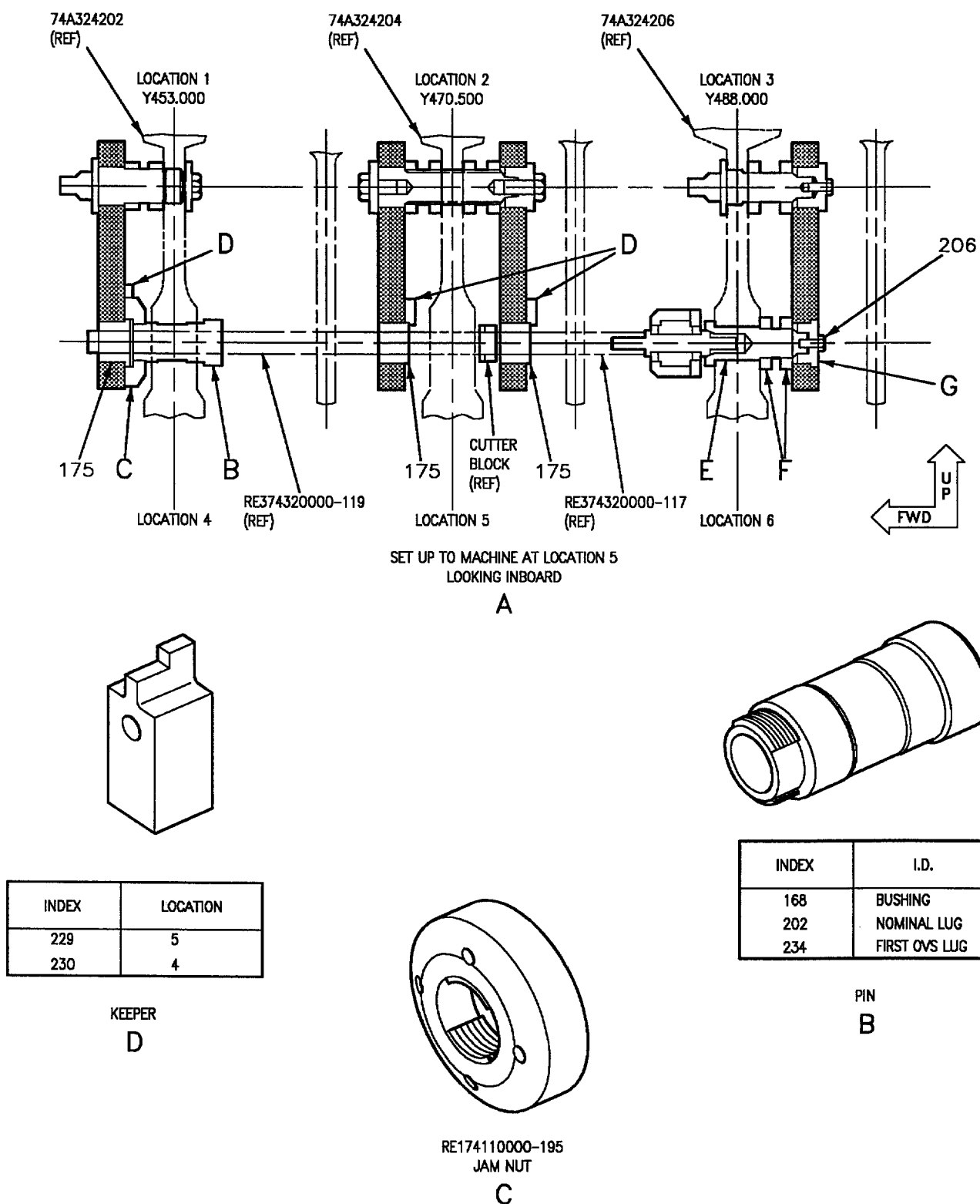
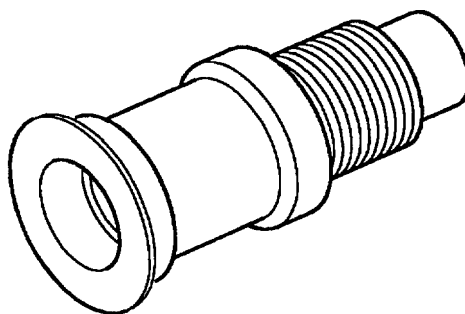


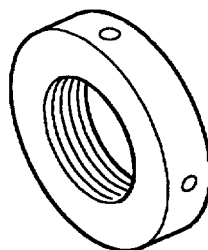
Figure 10. Setting Up to Machine I.D. of Bushing or Lug at Location 5, Y470.500 (Sheet 1)



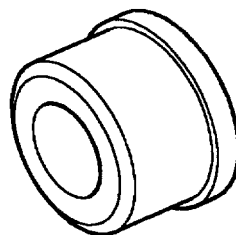
INDEX	I.D.
172	BUSHING
197	NOMINAL LUG
239	FIRST OVS LUG

PIN

E

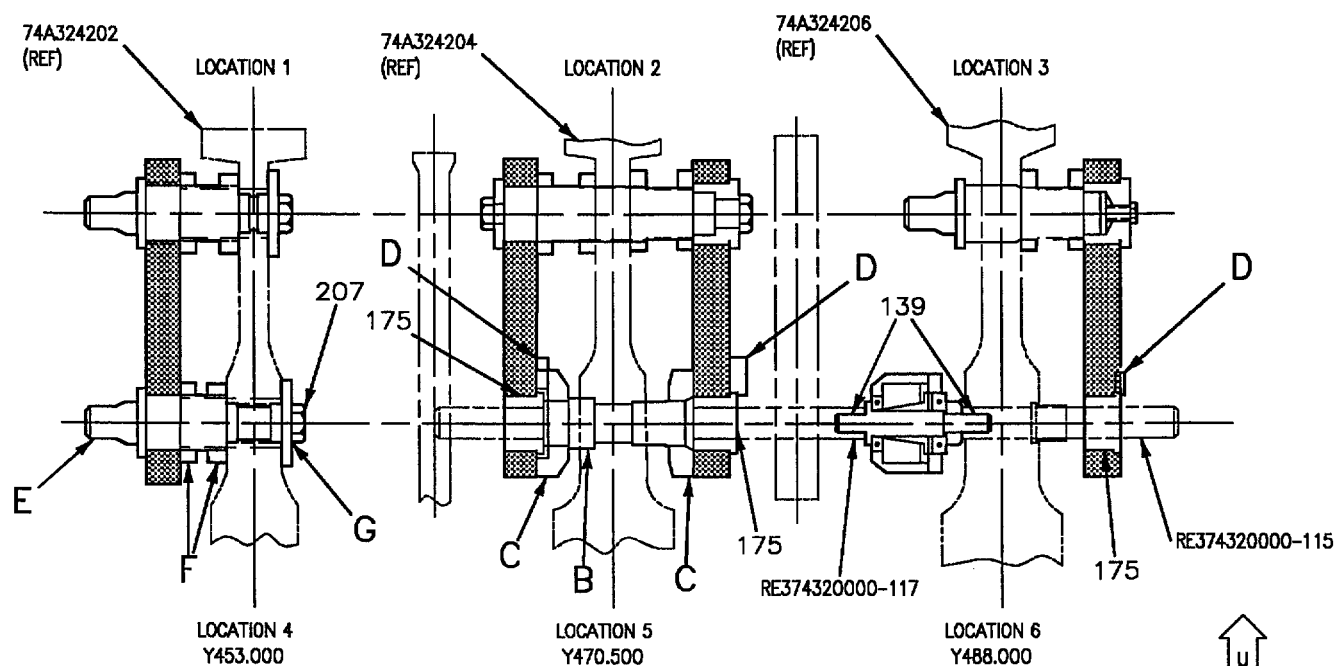
RE174110000-182
JAM NUT

F

RE174110000-191
PILOT BUSHING

G

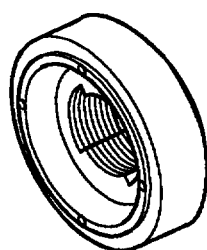
Figure 10. Setting Up to Machine I.D. of Bushing or Lug at Location 5,
Y470.500 (Sheet 2)



BODY OF SUBASSEMBLY B REMOVED FOR CLARITY
SET UP TO MACHINE AT LOCATION 6

A

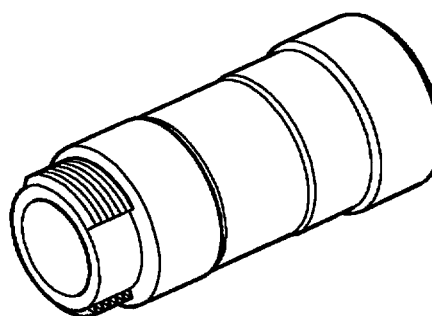
LOOKING INBOARD



RE174110000-195

JAM NUT

C

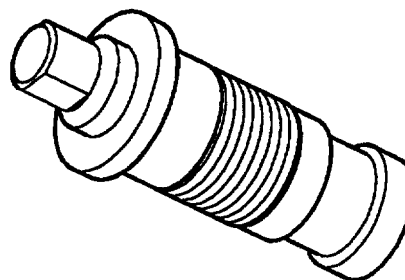
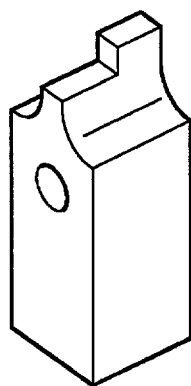


INDEX	I.D.
170	BUSHING
200	NOMINAL LUG
236	FIRST OVS LUG

GUIDE TUBE

B

Figure 11. Setting Up to Machine I.D. of Bushing or Lug at Location 6, Y488.000 (Sheet 1)

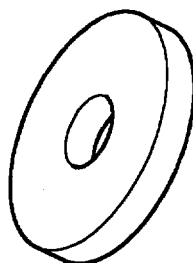


INDEX	LOCATION
230	5 FORWARD
229	5 AFT
228	6

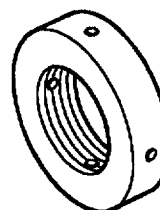
KEEPER
D

INDEX	I.D.
169	BUSHING
201	NOMINAL LUG
235	FIRST OVS. LUG

PIN
E



RE174110000-187
WASHER
G



RE174110000-184
JAM NUT
F

Figure 11. Setting Up to Machine I.D. of Bushing or Lug at Location 6,
Y488.000 (Sheet 2)

DEPOT MAINTENANCE
STRUCTURE REPAIR
CENTER FUSELAGE
WING ATTACH POINTS REAMING TOOL SET
PART NO. RE374320000-1

Reference Material

Structure Repair, Center Fuselage	A1-F18AC-SRM-230
Center Fuselage Wing Attach Lugs Check Fixture	WP037 00

Alphabetical Index

Subject	Page No.
Wing Attach Points Reaming Tool Set	1
Setting Up And Machining Lower Wing Attach Hole, Y453.000, Location 4	5
Setting Up And Machining Lower Wing Attach Hole, Y470.500, Location 5	6
Setting Up And Machining Lower Wing Attach Hole, Y488.000, Location 6	7
Setting Up And Machining Upper Wing Attach Hole, Y453.000, Location 1	1
Setting Up And Machining Upper Wing Attach Hole, Y470.500, Location 2	3
Setting Up And Machining Upper Wing Attach Hole, Y488.000, Location 3	4

Record of Applicable Technical Directives

None

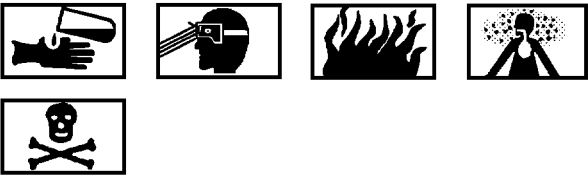
1. WING ATTACH POINTS REAMING TOOL SET.

2. The wing attach points reaming tool set is used to make sure wing attach points are machined correctly and to specifications. The wing attach points reaming tool set is used with center fuselage wing attach lugs check fixture RE174110000-1/-2.

3. SETTING UP AND MACHINING UPPER WING ATTACH HOLE, Y453.000, LOCATION 1. See Figure 1.

4. Machining Step 1.

a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium 18

b. Machine newly installed beryllium copper bushings in 74A324202 bulkhead.

(1) Install boring bars (details 117 and 119) into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Inspect diameter of cutter (detail 111) using Adjust-O-Matic gage (detail 127) and table 1.

Table 1. Tool Selection and Use.







Cutter Number 	Set Block Number	Machining Step	Use
111	128	1	Rough bore in 74A324915 bushing, 2.2350 diameter. Ref: MUSKEGON cutter style B.
112	129	2	Finish bore in 74A324915 bushing, 2.2490 ± 0.0003 diameter. Ref: MUSKEGON cutter style C.
114		3	Final sizing of 74A324915 bushing, $2.2500 +0.0007 -0.0000$ diameter. Ref: Roller sizing tool.
113	130	4 ovs. hole in bulkhead	Oversize hole in any of three bulkheads $2.4375 +0.0020 -0.0000$ diameter. Ref: MUSKEGON cutter style C.
121	131	1	Rough bore in 74A324916 bushing, 2.4850 diameter. Ref: MUSKEGON cutter style B.
122	132	2	Finish bore in 74A324916 bushing, 2.4990 ± 0.0003 diameter. Ref: MUSKEGON cutter style C.
124		3	Final sizing of 74A324916 bushing, $2.5000 +0.0007 -0.0000$ diameter. Ref: Roller sizing tool.

Table 1. Tool Selection and Use. (Continued)

Cutter Number 	Set Block Number	Machining Step	Use
123	133	4 ovs. hole in bulkhead	Oversize hole in any of three bulkheads, 2.6845 +0.0020 -0.0000 diameter. Ref: MUSKE-GON cutter style C.
NOTES  Adjust-O-Matic gage RE374320000-127 used for setting diameter of cutters.  Adapter, details 125 and 126 for roller sizing tool.			

(3) Install cutter (detail 111) into boring bar (detail 119).

(4) Machine 2.2350 diameter hole in 74A324915 beryllium copper bushing.

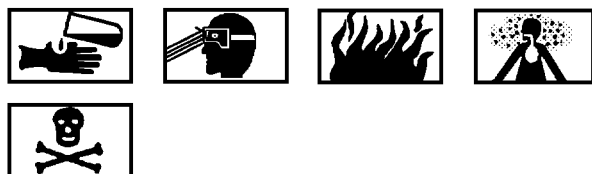
5. Machining Step 2.

a Remove cutter (detail 111) from boring bar (detail 119).

b. Move subassembly C, RE174110000-1/-2, (WP037 00) aft to start position.

c. Inspect diameter of cutter (detail 112) using Adjust-O-Matic gage (detail 127) and table 1.

d. Install cutter (detail 112) into boring bar (detail 119).



Beryllium

18

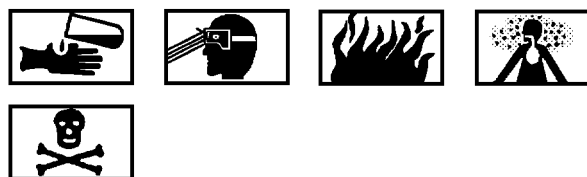
e. Machine 2.2490 diameter hole in 74A324915 beryllium copper bushing.

f. Inspect bore to 2.2490 ± 0.0003 diameter.

6. Machining Step 3.

a. Remove cutter (detail 112) from boring bar (detail 119).

b. Remove boring bars (details 117 and 119) from subassembly C, RE174110000-1/-2 (WP037 00).



Beryllium

18

c. Use Roll-A-Finish tool (detail 114) for sizing 2.2500 diameter bore in beryllium copper bushing.

d. Inspect bore to 2.2500 +0.0007 -0.0000 diameter.

7. Machining 74A324202 Bulkhead, Wing Attach Hole Oversize.

a. Install boring bars (details 117 and 119) into subassembly C, RE174110000-1/-2, (WP037 00).

b. Inspect diameter of cutter (detail 113) using Adjust-O-Matic gage (detail 127) and table 1.

c. Install cutter (detail 113) into boring bar (detail 119).

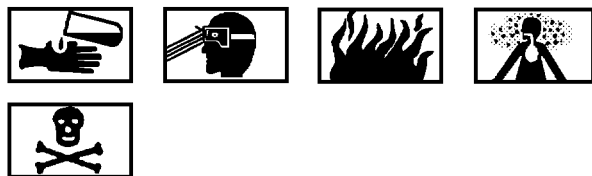
d. Machine oversize 2.4375 diameter hole in 74A324202 bulkhead.

e. Inspect oversize diameter hole in 74A324202 bulkhead to 2.4375 +0.0020 -0.0000 diameter.

8. SETTING UP AND MACHINING UPPER WING ATTACH HOLE, Y470.500, LOCATION 2. See figure 2.

9. Machining Step 1.

- a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium

18

- b. Machine newly installed beryllium copper bushings in 74A324204 bulkhead.

(1) Install boring bars (details 117 and 119) into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Inspect diameter of cutter (detail 111) using Adjust-O-Matic gage (detail 127) and table 1.

(3) Install cutter (detail 111) into boring bar (detail 117).

(4) Machine 2.2350 diameter hole in 74A324915 beryllium copper bushing.

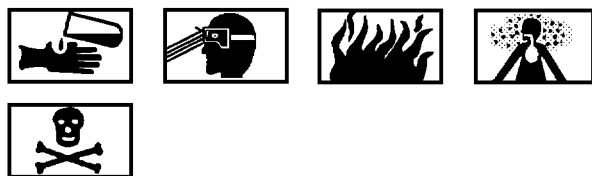
10. Machining Step 2.

- a. Remove cutter (detail 111) from boring bar (detail 117).

- b. Move subassembly C, RE174110000-1/-2, (WP037 00) aft to start position.

- c. Inspect diameter of cutter (detail 112) using Adjust-O-Matic gage (detail 127) and table 1.

- d. Install cutter (detail 112) into boring bar (detail 117).



Beryllium

18

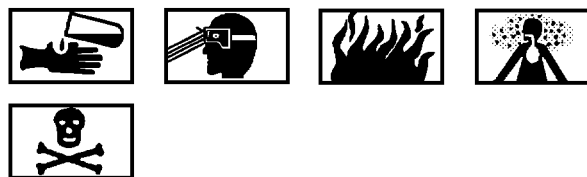
- e. Machine 2.2490 diameter hole in 74A324915 beryllium copper bushing.

- f. Inspect bore to 2.2490 ± 0.0003 diameter.

11. Machining Step 3.

- a. Remove cutter (detail 112) from boring bar (detail 117).

- b. Remove boring bars (details 117 and 119) from subassembly C, RE174110000-1/-2, (WP037 00).



Beryllium

18

- c. Use Roll-A-Finish tool (detail 114) for sizing 2.2500 diameter bore in beryllium copper bushing.

- d. Inspect bore to 2.2500 +0.0007 -0.0000 diameter.

12. Machining 74A324204 Bulkhead, Wing Attach Hole Oversize.

- a. Install boring bars (details 117 and 119) into subassembly C, RE174110000-1/-2, (WP037 00).

- b. Inspect diameter of cutter (detail 113) using Adjust-O-Matic gage (detail 127) and table 1.

- c. Install cutter (detail 113) into boring bar (detail 117).

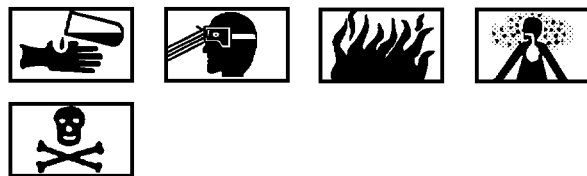
- d. Machine oversize 2.4375 diameter hole in 74A324204 bulkhead.

- e. Inspect oversize diameter hole in 74A324204 bulkhead to 2.4375 +0.0020 -0.0000 diameter.

13. SETTING UP AND MACHINING UPPER WING ATTACH HOLE, Y488.000, LOCATION 3. See figure 3.

14. Machining Step 1.

- a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium

18

- b. Machine newly installed beryllium copper bushings in 74A324206 bulkhead.

(1) Install boring bar (detail 119) and boring bar (detail 104), RE374320000-1, into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Inspect diameter of cutter (detail 111) using Adjust-O-Matic gage (detail 127) and table 1.

(3) Install cutter (detail 111) into boring bar (detail 104).

(4) Machine 2.2350 diameter hole in 74A324915 beryllium copper bushing.

15. Machining Step 2.

a. Remove cutter (detail 111) from boring bar (detail 104).

b. Move subassembly C, RE174110000-1/-2, (WP037 00) aft to start position.

c. Inspect diameter of cutter (detail 112) using Adjust-O-Matic gage (detail 127) and table 1.

d. Install cutter (detail 112) onto boring bar (detail 104).



Beryllium

18

e. Machine 2.2490 diameter hole in 74A324915 beryllium copper bushing.

f. Inspect bore to 2.2490 ± 0.0003 diameter.

16. Machining Step 3.

a. Remove cutter (detail 112) from boring bar (detail 104).

b. Remove boring bars (details 119 and 104) and subassembly C, RE174110000-1/-2, (WP037 00).



Beryllium

18

c. Use Roll-A-Finish tool (detail 114) for sizing 2.2500 diameter bore in beryllium copper bushing.

d. Inspect bore to $2.2500 +0.0007 -0.0000$ diameter.

17. Machining 74A324206 Bulkhead, Wing Attach Hole Oversize.

a. Install boring bar (detail 119) and boring bar (detail 104) into subassembly C, RE174110000-1/-2, (WP037 00).

b. Inspect diameter of cutter (detail 113) using Adjust-O-Matic gage, (detail 127) and table 1.

c. Install cutter (detail 113) into boring bar (detail 104).

d. Machine oversize 2.4375 diameter hole in 74A324906 bulkhead.

e. Inspect oversize diameter hole in 74A324206 bulkhead to $2.4375 +0.0020 -0.0000$ diameter.

18. SETTING UP AND MACHINING LOWER WING ATTACH HOLE, Y453.000, LOCATION 4. See figure 4.

19. Machining Step 1.

a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium

18

b. Machine newly installed beryllium copper bushings in 74A324202 bulkhead.

(1) Install boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Install boring bar (detail 119) into boring bar (detail 117).

(3) Inspect diameter of cutter (detail 121) using Adjust-O-Matic gage (detail 127) and table 1.

(4) Install cutter (detail 121) into boring bar (detail 119).

(5) Machine 2.4850 diameter hole in 74A324916 beryllium copper bushing.

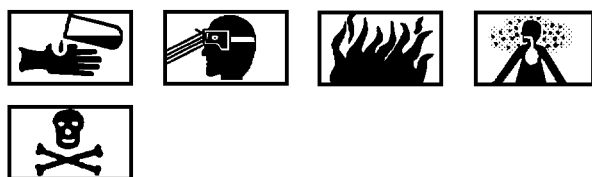
20. Machining Step 2.

a. Remove cutter (detail 121) from boring bar (detail 119).

b. Move subassembly C, RE174110000-1/-2, (WP037 00), aft to start point.

c. Inspect diameter of cutter (detail 122) using Adjust-O-Matic gage (detail 127) and table 1.

d. Install cutter (detail 122) into boring bar (detail 119).



Beryllium

18

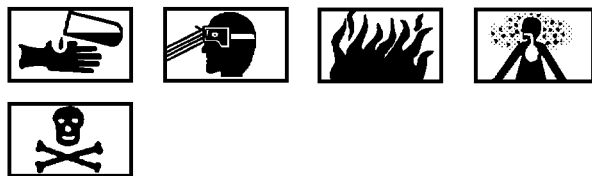
e. Machine 2.4990 diameter hole in 74A324916 beryllium copper bushing.

f. Inspect bore to 2.4990 \pm 0.0003 diameter.

21. Machining Step 3.

a. Remove cutter (detail 122) from boring bar (detail 119).

b. Remove boring bars (details 117 and 119) from subassembly C, RE174110000-1/-2, (WP037 00).



Beryllium

18

c. Use Roll-A-Finish tool (detail 124) for sizing 2.5000 diameter bore in beryllium copper bushing.

d. Inspect bore to 2.5000 +0.0007 -0.0000 diameter.

22. Machining 74A324202 Bulkhead, Wing Attach Hole Oversize.

a. Install boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

b. Inspect diameter of cutter (detail 123) using Adjust-O-Matic gage (detail 127) and table 1.

c. Install cutter (detail 123) into boring bar (detail 117).

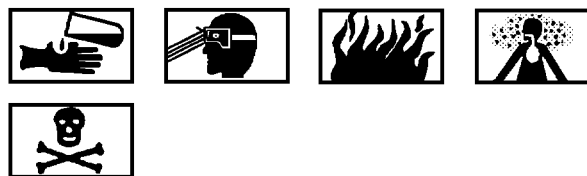
d. Machine oversize 2.6845 diameter hole in 74A324202 bulkhead.

e. Inspect oversize diameter hole in 74A324202 bulkhead to 2.6845 +0.0020 -0.0000 diameter.

23. SETTING UP AND MACHINING LOWER WING ATTACH HOLE, Y470.500, LOCATION 5. See figure 5.

24. Machining Step 1.

a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium

18

b. Machine newly installed beryllium copper bushings in 74A324204 bulkhead.

(1) Install boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Install boring bar (detail 119) into boring bar (detail 117).

(3) Inspect diameter of cutter (detail 121) using Adjust-O-Matic gage (detail 127) and table 1.

(4) Install cutter (detail 121) into boring bar (detail 117).

(5) Machine 2.4850 diameter hole in 74A324916 beryllium copper bushing.

25. Machining Step 2.

a. Remove cutter (detail 121) from boring bar (detail 117).

b. Move subassembly C, RE174110000-1/-2, (WP037 00) aft to start position.

c. Inspect diameter of cutter (detail 122) using Adjust-O-Matic gage (detail 127) and table 1.

d. Install cutter (detail 122) into boring bar (detail 117).



Beryllium

18

e. Machine 2.4990 diameter hole in 74A324916 beryllium copper bushing.

f. Inspect bore to 2.4990 +0.0003 diameter.

26. Machining Step 3.

a. Remove cutter (detail 122) from boring bar (detail 117).

b. Remove boring bars (details 117 and 119) from subassembly C, RE174110000-1/-2, (WP037 00).



Beryllium

18

c. Use Roll-A-Finish tool (detail 124) for sizing 2.5000 diameter bore in beryllium copper bushing.

d. Inspect bore to 2.5000 +0.0007 -0.0000 diameter.

27. Machining 74A324204 Bulkhead, Wing Attach Hole Oversize.

a. Install boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

b. Inspect diameter of cutter (detail 123) using Adjust-O-Matic gage (detail 127) and table 1.

c. Install cutter (detail 123) into boring bar (detail 117).

d. Machine oversize 2.6845 diameter hole in 74A324204 bulkhead.

e. Inspect oversize diameter hole in 74A324204 bulkhead to 2.6845 +0.0020 -0.0000 diameter.

28. SETTING UP AND MACHINING LOWER WING ATTACH HOLE, Y488.000, LOCATION 6. See figure 6.

29. Machining Step 1.

a. Set up per RE174110000-1/-2 (WP037 00).



Beryllium

18

b. Machine newly installed beryllium copper bushings in 74A324206 bulkhead.

(1) Install boring bar (detail 115) and boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

(2) Inspect diameter of cutter (detail 121) using Adjust-O-Matic gage (detail 127) and table 1.

(3) Install cutter (detail 121) into boring bar (detail 115).

(4) Machine 2.4850 diameter hole in 74A324916 beryllium copper bushing.

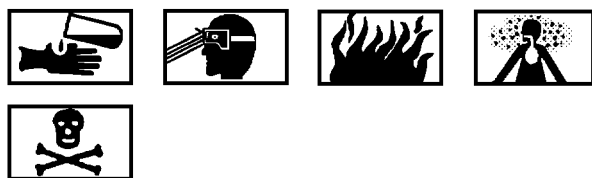
30. Machining Step 2.

a. Remove cutter (detail 121) from boring bar (detail 115).

b. Move subassembly C, RE174110000-1/-2, (WP037 00) aft to start position.

c. Inspect diameter of cutter (detail 122) using Adjust-O-Matic gage (detail 127) and table 1.

d. Install cutter (detail 122) into boring bar (detail 115).



Beryllium

18

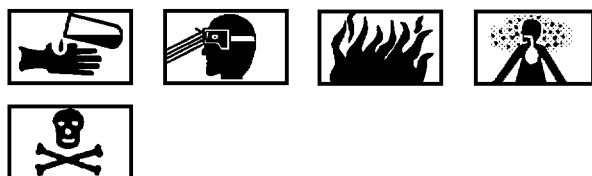
e. Machine 2.4990 diameter hole in 74A324916 beryllium copper bushing.

f. Inspect bore 2.4990 ± 0.0003 diameter.

31. Machining Step 3.

a. Remove cutter (detail 122) from boring bar (detail 115).

b. Remove boring bars (details 115 and 117) and subassembly C, RE174110000-1/-2, (WP037 00).



Beryllium

18

c. Use Roll-A-Finish tool (detail 124) for sizing 2.5000 diameter bore in beryllium copper bushing.

d. Inspect bore to 2.5000 +0.0007 -0.0000 diameter.

32. Machining 74A324206 Bulkhead, Wing Attach Hole Oversize.

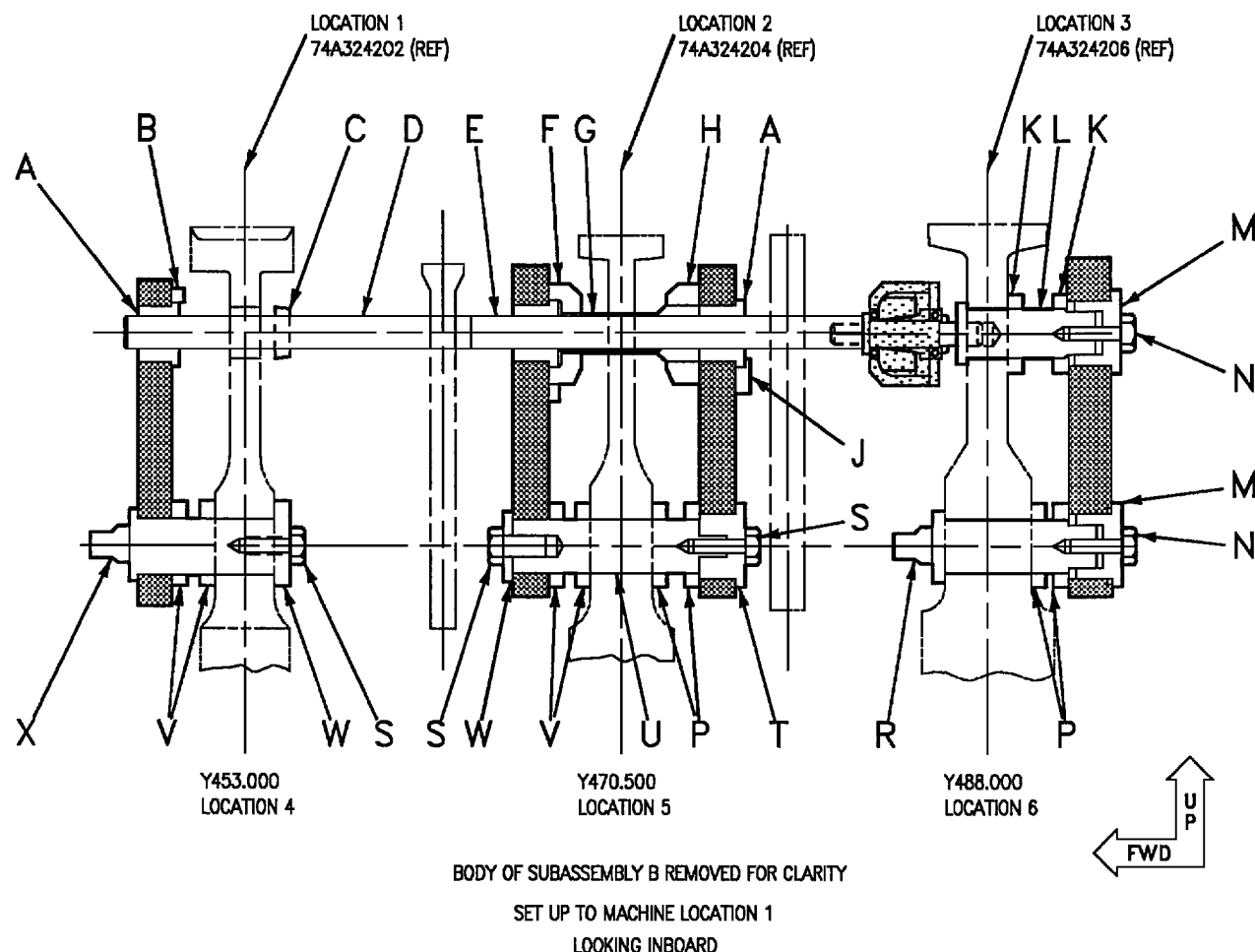
a. Install boring bar (detail 115) and boring bar (detail 117) into subassembly C, RE174110000-1/-2, (WP037 00).

b. Inspect diameter of cutter (detail 123) using Adjust-O-Matic gage (detail 127) and table 1.

c. Install cutter (detail 123) into boring bar (detail 115).

d. Machine oversize 2.6845 diameter hole in 74A324206 bulkhead.

e. Inspect oversize diameter hole in 74A324206 bulkhead to 2.6845 +0.0020 -0.0000 diameter.



LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.


2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE	CUTTER
128	111
129	112
130	113
-	114

- 3 111 CUTTER-ROUGH BORE, 74A324915 BUSHING, 2.2350 I.D. FIRST OPERATION.
- 112 CUTTER-FINISH BORE, 74A324915 BUSHING, 2.2490 I.D. SECOND OPERATION.
- 114 CUTTER-FINAL SIZING, 74A324915 BUSHING, 2.2500 +0.0007 -0.0000 FINAL OPERATION.
- 113 CUTTER-OVS. IN THE BULKHEADS, 2.4375 +0.0020 -0.0000 I.D., LAST CHANCE, REF: MUSKEGON CUTTER STYLE C.

Figure 1. Machining at Location 1 (Sheet 1)

LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	175	ROTARY BUSHING
B	229	KEEPER
C	111	CUTTER (SEE TABLE 1) 
D	119	BORING BAR

LOCATION 2:

E	117	BORING BAR
F	194	JAM NUT (FWD)
G	165	GUIDE TUBE (BUSHING I.D. 2.2500)
G	181	GUIDE TUBE (NOMINAL LUG I.D. 2.4215)
G	242	GUIDE TUBE (FIRST OVS. LUG I.D. 2.4375)
H	196	JAM NUT (AFT)
A	175	ROTARY BUSHING
J	230	KEEPER

LOCATION 3:

		SUBASSEMBLY C
K	185	JAM NUT (2 AFT)
L	167	PIN (BUSHING I.D. 2.2500)
L	204	PIN (NOMINAL LUG I.D. 2.4215)
L	232	PIN (FIRST OVS. LUG I.D. 2.4375)
M	189	PILOT BUSHING
N	206	HEX BOLT 1/2 - 13 X 2 LG

LOCATION 6:

M	189	PILOT BUSHING
N	206	HEX BOLT 1/2 - 13 X 2 LG
P	186	JAM NUT (2 AFT)
R	173	PIN (BUSHING I.D. 2.500)
R	198	PIN (NOMINAL LUG I.D. 2.6685)
R	238	PIN (FIRST OVS LUG I.D. 2.6845)

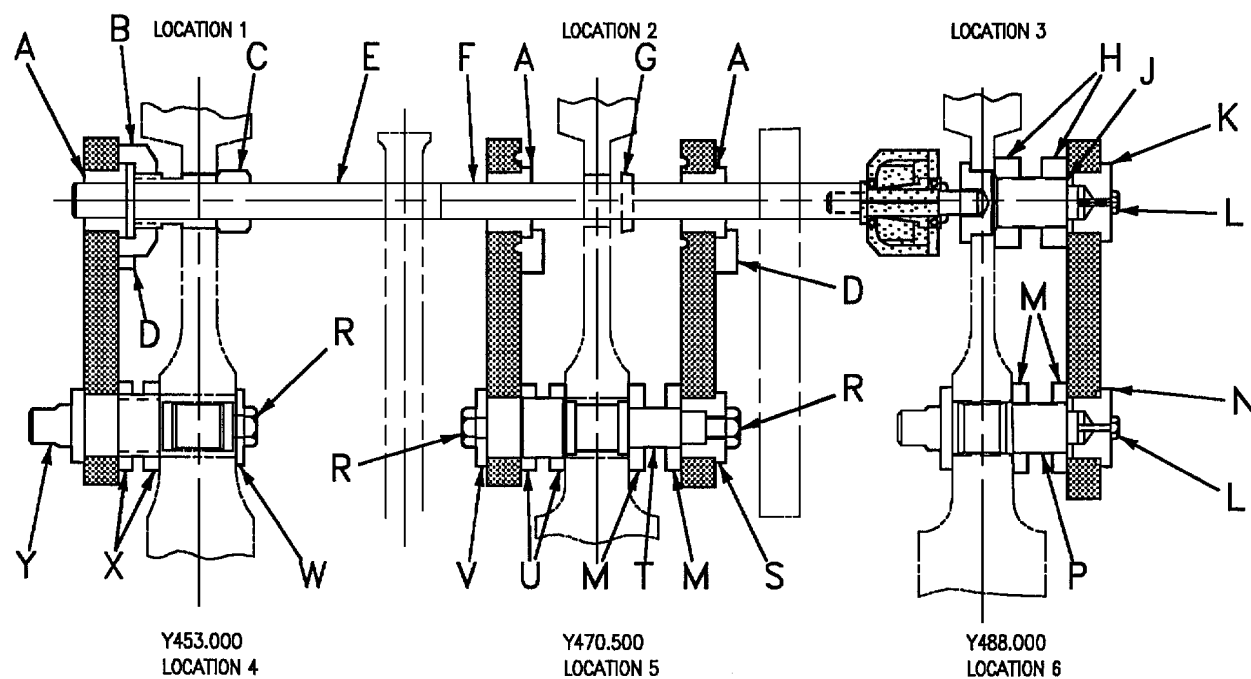
LOCATION 5:

S	207	HEX BOLT 1-8 X 2 LG
T	188	PILOT BUSHING
P	186	JAM NUT (2AFT)
U	171	PIN (BUSHING I.D. 2.500)
U	199	PIN (NOMINAL LUG I.D. 2.6685)
U	237	PIN (FIRST OVS. LUG I.D. 2.6845)
V	184	JAM NUT (2 FWD)
W	187	WASHER

LOCATION 4:

S	207	HEX BOLT 1-8 X 2 LG
W	187	WASHER
V	184	JAM NUT (2 FWD)
X	169	PIN (BUSHING I.D. 2.500)
X	201	PIN (NOMINAL LUG I.D. 2.6685)
X	235	PIN (FIRST OVS, LUG I.D. 2.6845)

Figure 1. Machining at Location 1 (Sheet 2)



BODY OF SUBASSEMBLY B REMOVED FOR CLARITY

SET UP TO MACHINE LOCATION 2

LOOKING INBOARD

LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.

2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE	CUTTER
128	111
129	112
130	113
-	114


- 3 111 CUTTER-ROUGH BORE, 74A324915 BUSHING, 2.2350 I.D. FIRST OPERATION.
- 112 CUTTER-FINISH BORE, 74A324915 BUSHING, 2.2490 I.D. SECOND OPERATION.
- 114 CUTTER-FINAL SIZING, 74A324915 BUSHING, 2.2500 +0.0007 -0.0000 FINAL OPERATION.
- 113 CUTTER-OVS. IN THE BULKHEADS, 2.4375 +0.0020 -0.0000 I.D., LAST CHANCE, REF: MUSKEGON CUTTER STYLE C.

Figure 2. Machining at Location 2 (Sheet 1)

LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	175	ROTARY BUSHING
B	194	JAM NUT (AFT)
C	162	GUIDE TUBE (BUSHING I.D. 2.2500)
C	179	GUIDE TUBE (NOMINAL LUG I.D. 2.4215)
C	241	GUIDE TUBE (FIRST OVS. LUG I.D. 2.4375)
D	230	KEEPER
E	119	BORING BAR

LOCATION 2:

A	175	ROTARY BUSHING
F	117	BORING BAR
G	111	CUTTER (SEE TABLE 1) 
A	175	ROTARY BUSHING
D	230	KEEPER (1 FWD) (1 AFT)

LOCATION 3:

		SUBASSEMBLY C
H	185	JAM NUT (2 AFT)
J	167	PIN (BUSHING I.D. 2.2500)
J	204	PIN (NOMINAL LUG I.D. 2.4215)
J	232	PIN (FIRST OVS. LUG I.D. 2.4375)
K	189	PILOT BUSHING
L	206	HEX BOLT 1/2 -13 X 2 LG

LOCATION 6:

M	186	JAM NUT (2 AFT)
N	189	PILOT BUSHING
P	173	PIN (BUSHING I.D. 2.500)
P	198	PIN (NOMINAL LUG I.D. 2.6685)
P	238	PIN (FIRST OVS. LUG I.D. 2.6845)
L	206	HEX BOLT 1/2 - 13 X 2 LG

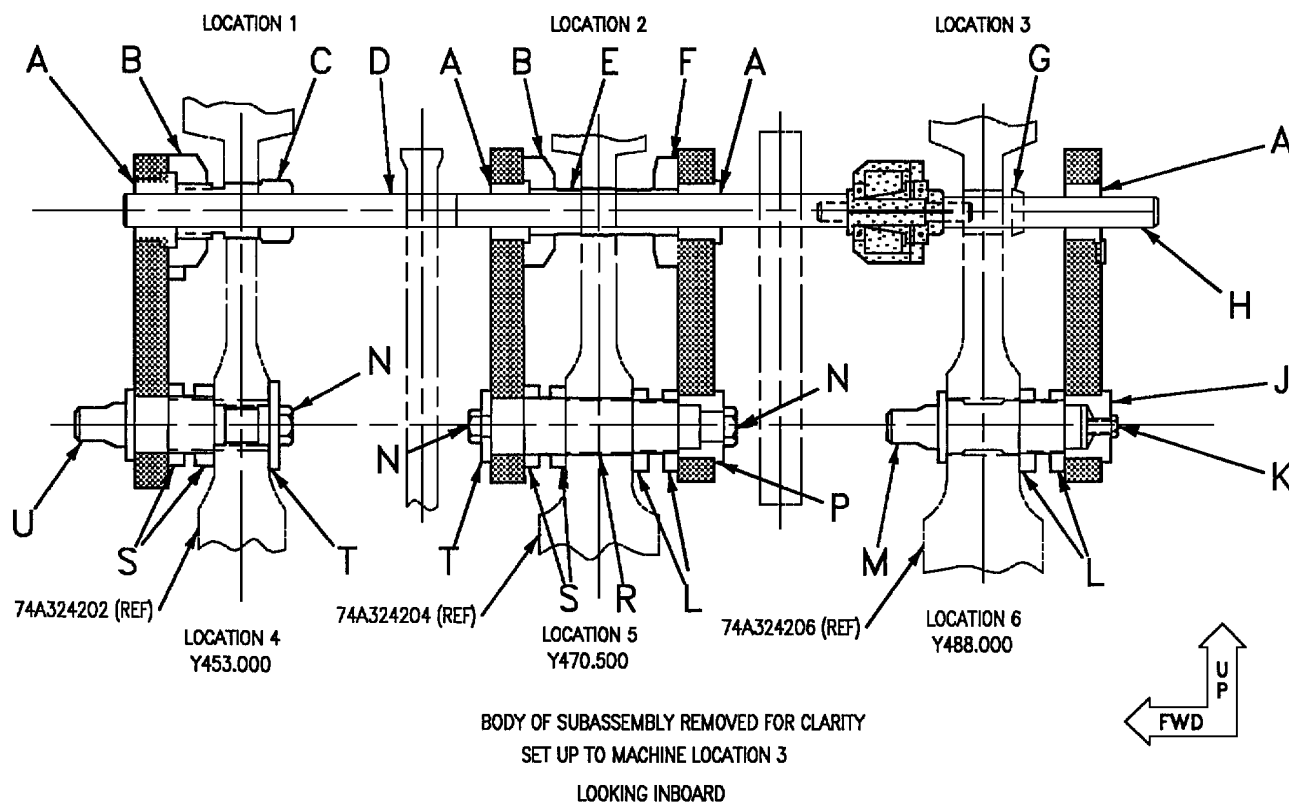
LOCATION 5:

R	207	HEX BOLT 1-8 X 2 LG
S	188	PILOT BUSHING
M	186	JAM NUT (2 AFT)
T	171	PIN (BUSHING I.D. 2.500)
T	199	PIN (NOMINAL LUG I.D. 2.6685)
T	237	PIN (FIRST OVS. LUG I.D. 2.6845)
U	183	JAM NUT (2 FWD)
V	187	WASHER

LOCATION 4:

R	207	HEX BOLT 1-8 X 2 LG
W	187	WASHER
X	184	JAM NUT (2 FWD)
Y	169	PIN (BUSHING I.D. 2.500)
Y	201	PIN (NOMINAL LUG I.D. 2.6685)
Y	235	PIN (FIRST OVS. LUG I.D. 2.6845)

Figure 2. Machining at Location 2 (Sheet 2)



LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.

2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE	CUTTER
128	111
129	112
130	113
-	114

- 3
- 111 CUTTER-ROUGH BORE, 74A324915 BUSHING, 2.2350 I.D. FIRST OPERATION.
- 112 CUTTER-FINISH BORE, 74A324915 BUSHING, 2.2490 I.D. SECOND OPERATION.
- 114 CUTTER-FINAL SIZING, 74A324915 BUSHING, 2.2500 +0.0007 -0.0000 FINAL OPERATION.
- 113 CUTTER-OVS. IN THE BULKHEADS, 2.4375 +0.0020 -0.0000 I.D., LAST CHANCE, REF: MUSKEGON CUTTER STYLE C.

Figure 3. Machining at Location 3 (Sheet 1)


LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	175	ROTARY BUSHING
B	194	JAM NUT (1 FWD)
C	162	GUIDE TUBE (BUSHING I.D. 2.2500)
C	179	GUIDE TUBE (NOMINAL LUG I.D. 2.4215)
C	241	GUIDE TUBE (FIRST OVS. LUG I.D. 2.4375)
D	119	BORING BAR

LOCATION 2:

A	175	ROTARY BUSHING
B	194	JAM NUT (1 FWD)
E	165	GUIDE TUBE (BUSHING I.D. 2.2500)
E	181	GUIDE TUBE (NOMINAL LUG I.D. 2.4215)
E	242	GUIDE TUBE (FIRST OVS. LUG I.D. 2.4375)
F	196	JAM NUT (1 AFT)

LOCATION 3:

SUBASSEMBLY C		
G	111	CUTTER (SEE TABLE 1) 
A	175	ROTARY BUSHING
H	104	BORING BAR

LOCATION 6:

J	189	PILOT BUSHING
K	206	HEX BOLT 1/2 - 13 X 2 LG
L	186	JAM NUT (2 AFT)
M	173	PIN (BUSHING I.D. 2.500)
M	198	PIN (NOMINAL LUG I.D. 2.6685)
M	238	PIN (OVS. LUG I.D. 2.6845)

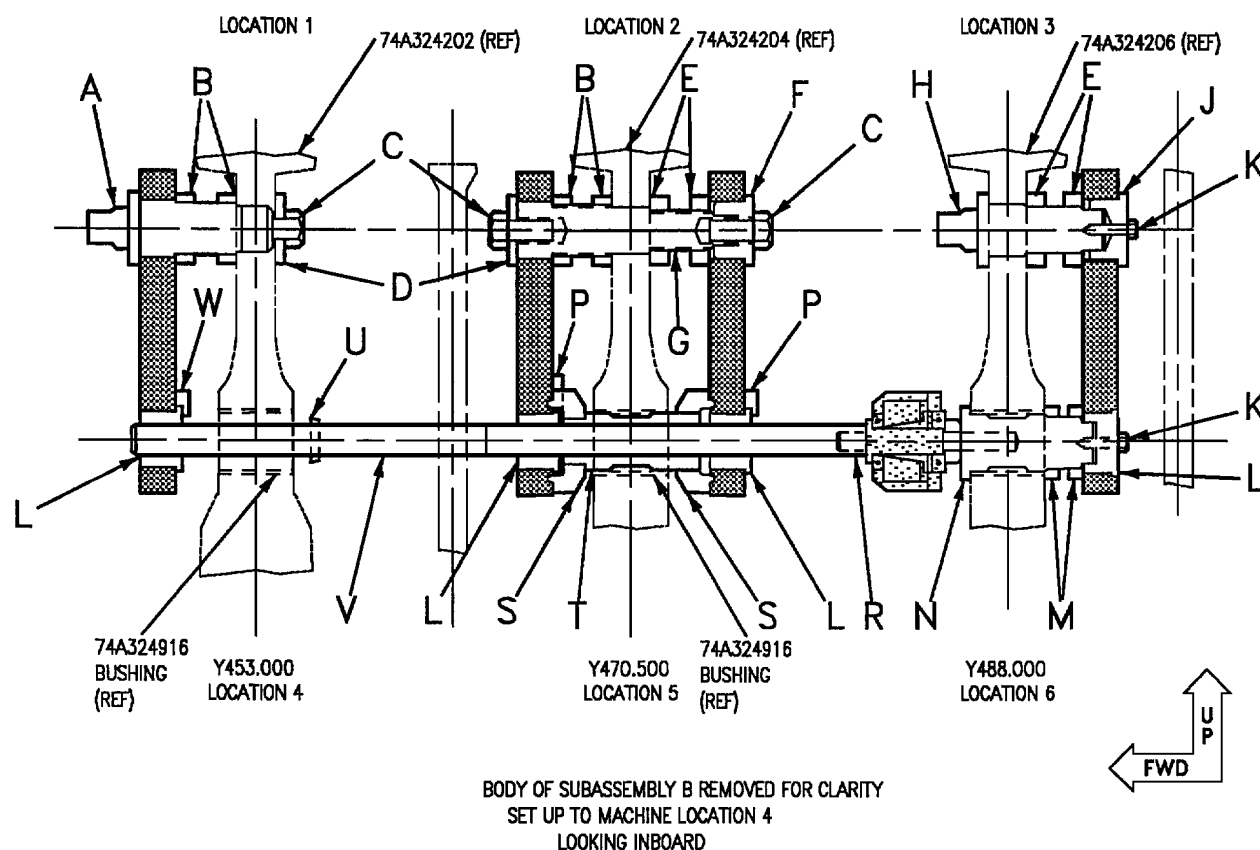
LOCATION 5:

N	207	HEX BOLT 1-8 X 2 LG (2 1FWD/1AFT)
P	188	PILOT BUSHING
L	186	JAM NUT (2AFT)
R	171	PIN (BUSHING I.D. 2.500)
R	199	PIN (NOMINAL LUG I.D. 2.6685)
R	237	PIN (FIRST OVS. I.D. 2.6845)
S	184	JAM NUT (2 FWD)
T	187	WASHER

LOCATION 4:

N	207	HEX BOLT 1-8 X 2 LG
T	187	WASHER
S	184	JAM NUT (2 FWD)
U	169	PIN (BUSHING I.D. 2.500)
U	201	PIN (NOMINAL LUG I.D. 2.6685)
U	235	PIN (FIRST OVS. I.D. 2.6845)

Figure 3. Machining at Location 3 (Sheet 2)



LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.
2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE	CUTTER
131	121
132	122
133	123
-	124

- 3 121 CUTTER-ROUGH BORE, 74A324916 BUSHING, 2.4850 I.D. FIRST OPERATION.
- 122 CUTTER-FINISH BORE, 74A324916 BUSHING, 2.4990 I.D. SECOND OPERATION.
- 124 CUTTER-FINAL SIZING, 74A324916 BUSHING, 2.5000 +0.0007 -0.0000 FINAL OPERATION.
- 123 CUTTER-OVS. IN THE BULKHEADS, 2.6845 +0.0020 -0.0000 I.D., LAST CHANCE, REF: MUSKEGON CUTTER STYLE C.

Figure 4. Machining at Location 4 (Sheet 1)

LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	163	PIN (BUSHING I.D. 2.2500)
A	180	PIN (NOMINAL LUG I.D. 2.4215)
A	240	PIN (FIRST OVS LUG I.D. 2.4375)
B	183	JAM NUT (2 FWD)
C	207	HEX BOLT 1-8 X 2 LG
D	187	WASHER

LOCATION 2:

D	187	WASHER
C	207	HEX BOLT 1-8 X 2 LG
B	183	JAM NUT (2 FWD)
E	185	JAM NUT (2 AFT)
F	188	PILOT BUSHING
G	164	PIN (BUSHING I.D. 2.2500)
G	205	PIN (NOMINAL LUG I.D. 2.4215)
G	231	PIN (FIRST OVS. LUG I.D. 2.4375)

LOCATION 3:

H	166	PIN (BUSHING I.D. 2.2500)
H	203	PIN (NOMINAL LUG I.D. 2.4215)
H	233	PIN (FIRST OVS. LUG I.D. 2.4375)
E	185	JAM NUT (2 AFT)
J	189	PILOT BUSHING
K	206	HEX BOLT 1/2 -13 X 2 LG

LOCATION 6:

K	206	HEX BOLT 1/2 -13 X 2 LG
L	191	PILOT BUSHING
M	182	JAM NUT (2 AFT)
N	172	PIN (BUSHING I.D. 2.500)
N	197	PIN (NOMINAL LUG I.D. 2.6685)
N	239	PIN (FIRST OVS. LUG I.D. 2.6845)
		SUBASSEMBLY C

LOCATION 5:

P	230	KEEPER (1 FWD/1 AFT)
R	117	BORING BAR
L	175	ROTARY BUSHING
S	195	JAM NUT (1 FWD/1 AFT)
T	170	GUIDE TUBE (BUSHING I.D. 2.500)
T	200	GUIDE TUBE (NOMINAL LUG I.D. 2.6685)
T	236	GUIDE TUBE (FIRST OVS. LUG I.D. 2.6845)

LOCATION 4:


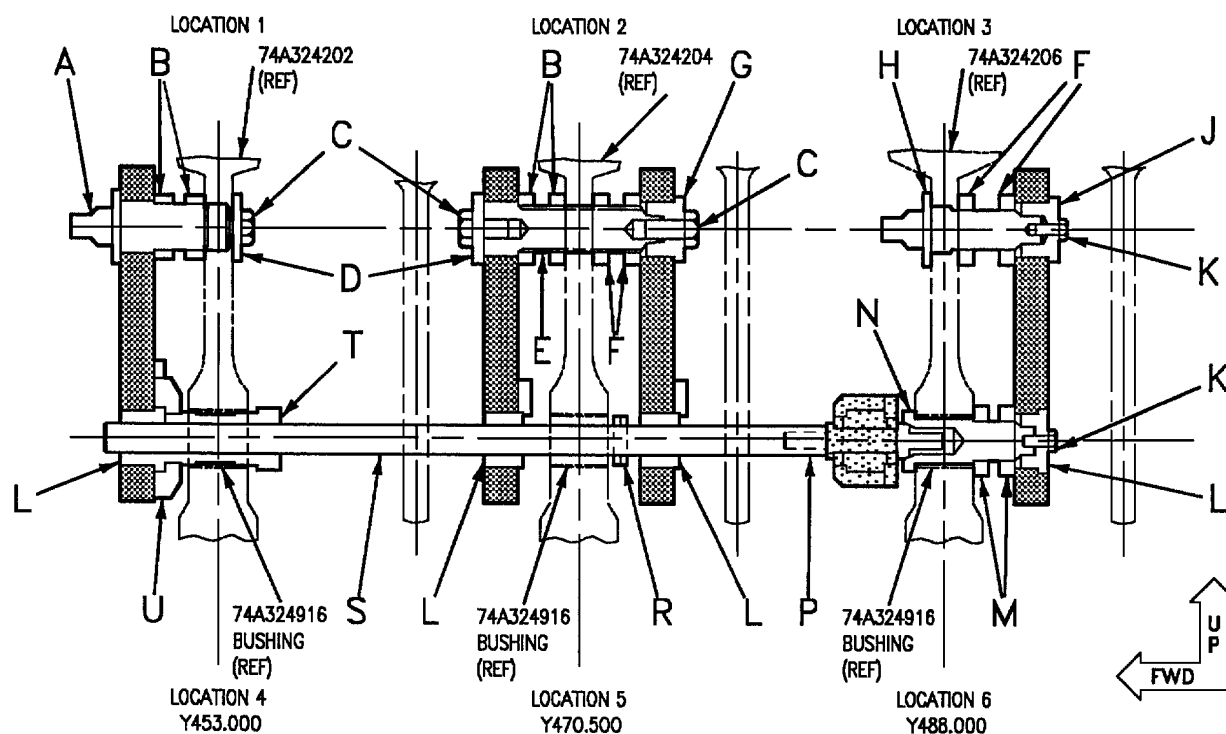
U	121	CUTTER (SEE TABLE 1) 
V	119	BORING BAR
L	175	ROTARY BUSHING
W	229	KEEPER

Figure 4. Machining at Location 4 (Sheet 2)



BODY OF SUBASSEMBLY B REMOVED FOR CLARITY
SET UP TO MACHINE LOCATION 5
LOOKING INBOARD

LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.

2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE CUTTER

131	121
132	122
133	123
-	124



- 121 CUTTER-ROUGH BORE, 74A324916 BUSHING, 2.4850 I.D. FIRST OPERATION.
122 CUTTER-FINISH BORE, 74A324916 BUSHING, 2.4990 I.D. SECOND OPERATION.
124 CUTTER-FINAL SIZING, 74A324916 BUSHING, 2.5000 +0.0007 -0.0000
FINAL OPERATION.
123 CUTTER-OVS. IN THE BULKHEADS, 2.6845 +0.0020 -0.0000 I.D., LAST CHANCE,
REF: MUSKEGON CUTTER STYLE C.

Figure 5. Machining at Location 5 (Sheet 1)

LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	163	PIN (BUSHING I.D. 2.2500)
A	180	PIN (NOMINAL LUG I.D. 2.4215)
A	240	PIN (FIRST OVS LUG I.D. 2.4375)
B	183	JAM NUT (2 FWD)
C	207	HEX BOLT 1-8 X 2 LG
D	187	WASHER

LOCATION 2:

D	187	WASHER
C	207	HEX BOLT 1-8 X 2 LG
E	164	PIN (BUSHING I.D. 2.2500)
E	205	PIN (NOMINAL LUG I.D. 2.4215)
E	231	PIN (FIRST OVS. LUG I.D. 2.4375)
B	183	JAM NUT (2 FWD)
F	185	JAM NUT (2 AFT)
G	188	PILOT BUSHING
C	207	HEX BOLT 1-8 X 2 LG

LOCATION 3:

H	166	PIN (BUSHING I.D. 2.2500)
H	203	PIN (NOMINAL LUG I.D. 2.4215)
H	233	PIN (FIRST OVS. LUG I.D. 2.4375)
F	185	JAM NUT (2 AFT)
J	189	PILOT BUSHING
K	206	HEX BOLT 1/2 -13 X 2 LG

LOCATION 6:

K	206	HEX BOLT 1/2 - 13 X 2 LG
L	191	PILOT BUSHING
M	182	JAM NUT (2 AFT)
N	172	PIN (BUSHING I.D. 2.500)
N	197	PIN (NOMINAL LUG I.D. 2.6685)
N	239	PIN (FIRST OVS. LUG I.D. 2.6845)
		SUBASSEMBLY C
P	117	BORING BAR

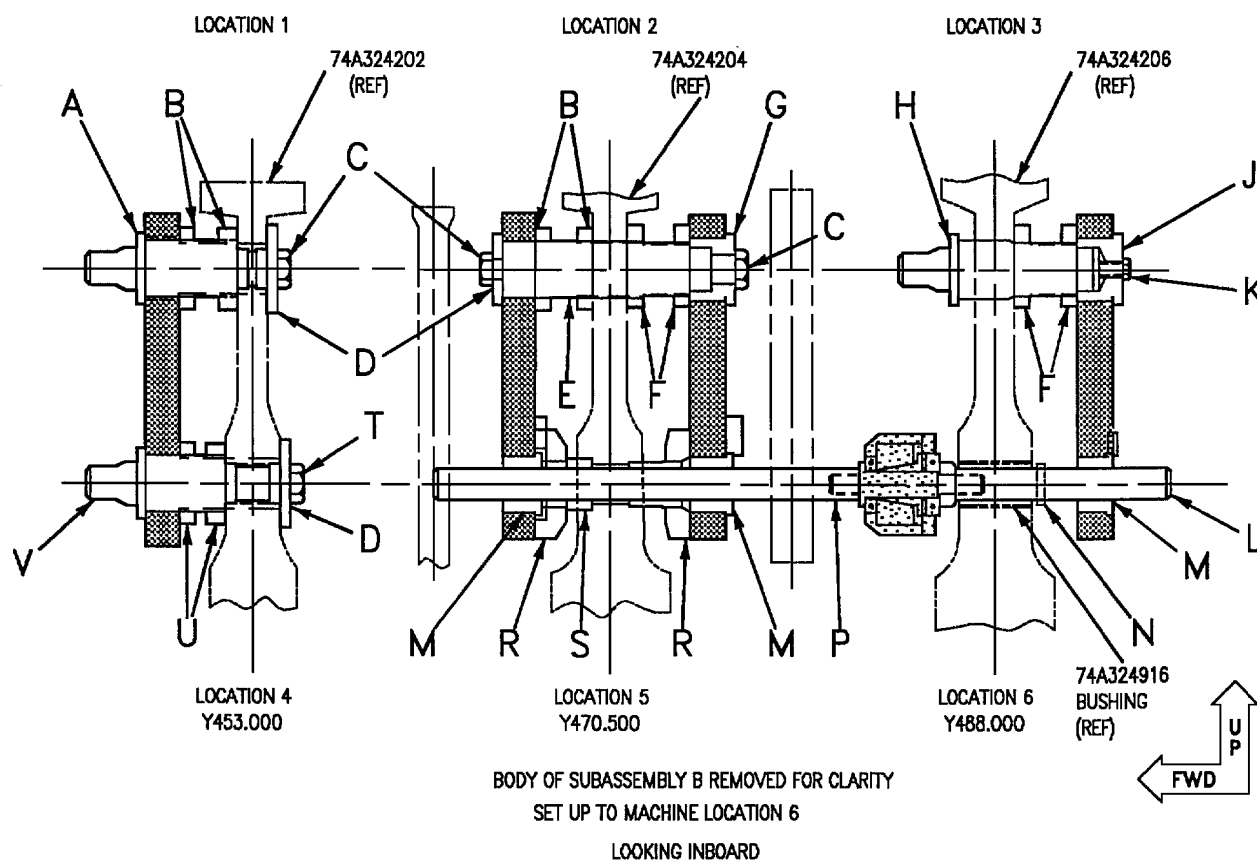
LOCATION 5:

L	175	ROTARY BUSHING
R	121	CUTTER (SEE TABLE 1) 

LOCATION 4:

S	119	BORING BAR
T	168	PIN (BUSHING I.D. 2.500)
T	202	PIN (NOMINAL LUG I.D. 2.6685)
T	234	PIN (FIRST OVS. LUG I.D. 2.6845)
U	195	JAM NUT (1 FWD)
L	175	ROTARY BUSHING

Figure 5. Machining at Location 5 (Sheet 2)



LEGEND



RE174110000-1/-2 SUBASSEMBLY B



RE174110000-1/-2 SUBASSEMBLY C

1. USE ADJUST-O-MATIC GAGE, (DETAIL 127) TO SETUP CUTTER DIAMETER.

2. ADJUST-O-MATIC GAGE SET BLOCK USE:

BLOCK SIZE	CUTTER
131	121
132	122
133	124
-	123



- 121 CUTTER-ROUGH BORE, 74A324916 BUSHING, 2.4850 I.D. FIRST OPERATION.
 122 CUTTER-FINISH, BORE, 74A324916 BUSHING, 2.4990 I.D. SECOND OPERATION.
 124 CUTTER-FINAL SIZING, 74A324916 BUSHING, 2.5000 +0.0007 -0.0000
 123 CUTTER-OVS. IN THE BULKHEADS, 2.6845 +0.0020 -0.0000 I.D., LAST CHANCE, REF: MUSKEGON CUTTER STYLE C.

Figure 6. Machining at Location 6 (Sheet 1)

LOCATION 1:

DETAIL	NUMBER	NOMENCLATURE
A	163	PIN (BUSHING I.D. 2.2500)
A	180	PIN (NOMINAL LUG I.D. 2.4215)
A	240	PIN (FIRST OVS LUG I.D. 2.4375)
B	183	JAM NUT (2 FWD)
C	207	HEX BOLT 1-8 X 2 LG
D	187	WASHER


LOCATION 2:

D	187	WASHER
C	207	HEX BOLT 1-8 X 2 LG
E	164	PIN (BUSHING I.D. 2.2500)
E	205	PIN (NOMINAL LUG I.D. 2.4215)
E	231	PIN (FIRST OVS. LUG I.D. 2.4375)
B	183	JAM NUT (2 FWD)
F	185	JAM NUT (2 AFT)
G	188	PILOT BUSHING
C	207	HEX BOLT 1-8 X 2 LG

LOCATION 3:

H	166	PIN (BUSHING I.D. 2.2500)
H	203	PIN (NOMINAL LUG I.D. 2.4215)
H	233	PIN (FIRST OVS. LUG I.D. 2.4375)
F	185	JAM NUT (2 AFT)
J	189	PILOT BUSHING
K	206	HEX BOLT 1/2 -13 X 2 LG

LOCATION 6:

L	115	BORING
M	175	ROTARY BUSHING
N	121	CUTTER (SEE TABLE 1) 
		SUBASSEMBLY C
P	117	BORING BAR

LOCATION 5:

M	175	ROTARY BUSHING
R	195	JAM NUT (1FWD/1AFT)
S	170	GUIDE TUBE (BUSHING I.D. 2.500)
S	200	GUIDE TUBE (NOMINAL LUG I.D. 2.6685)
S	236	GUIDE TUBE (FIRST OVS. LUG I.D. 2.6845)

LOCATION 4:

T	207	HEX BOLT 1-8 X 2 LG
D	187	WASHER
U	184	JAM NUT (2 FWD)
V	169	PIN (BUSHING I.D. 2.500)
V	201	PIN (NOMINAL LUG I.D. 2.6685)
V	235	PIN (FIRST OVS. LUG I.D. 2.6845)

Figure 6. Machining at Location 6 (Sheet 2)

DEPOT MAINTENANCE

STRUCTURE REPAIR

ENGINE AIR INLET MAINTENANCE FIXTURE, RE174322020-1 (LH)

Reference Material

Structure Repair, Center Fuselage	A1-F18AC-SRM-230
Engine Air Inlet Skins and Fairings	WP009 00
Engine Air Inlet Installation Alignment Fixture, RE474322020-1/-2	WP041 00
Aircraft Corrosion Control	A1-F18AC-SRM-500
Forward Center Fuselage Finish System and Markings	WP030 00
Fuel System	A1-F18AC-460-300
Removal-NO. 1 Fuel Tank (5CAP508)	WP010 00
Removal-NO. 1 Fuel Tank (5CAC508)	WP014 00
Installation-NO. 1 Fuel Tank (5CAP508)	WP011 00
Installation-NO. 1 Fuel Tank (5CAC508)	WP015 00
Removal-NO. 2 Fuel Tank (5CAP509)	WP018 00
Installation-NO. 2 Fuel Tank (5CAP509)	WP019 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Structure Repair, General Information	A1-F18AC-SRM-200
Accessory Kits and Spray Mist Coolant Tank	WP004 16
Structure Repair, Forward Fuselage	A1-F18AC-SRM-220
Leading Edge Extension Removal and Installation	WP041 01

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Record of Applicable Technical Directives

None

1. ENGINE AIR INLET MAINTENANCE
FIXTURE, RE174322020-1 (LH). See figure

1.

Support Equipment Required
(Continued)

2. Engine air inlet maintenance fixture, RE174322020-1 (LH) (maintenance fixture) consists of a frame, four station support boards, and many subassemblies. Maintenance fixture is used for checking, removing, repairing, and replacing damaged inlet structure.

Nomenclature	Part Number or Type Designation
Engine Air Inlet Installation/Alignment Fixture	RE474322020-1/-2

Support Equipment Required

Materials Required

Nomenclature	Part Number or Type Designation
Engine Air Inlet Beam Type Removal/ Installation Sling (GFE)	RE374322020

None

3. PREPARATION OF MAINTENANCE FIXTURE
FOR INLET. See figures 1 and 2. and table 1.

Table 1. Tooling Use

Detail No.	Name	Function
Subassembly B	Subassembly B, main- tenance fixture	Hold and index inlet during maintenance.
Subassembly D	Station support board	Y431.00 Hold many subassemblies and the inlet.
Subassembly F	Station support board	Y419.000 Hold many subassemblies and the inlet.
Subassembly H	Subassembly H	Locate structure and hold forward end of inlet in position at Y395.000.
Subassembly K	Subassembly K	Locate former at Y395.000.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
Subassembly N	Subassembly N	Hold and index structure, use with 141.
Subassembly R	Subassembly R	Hold and index ramp, use with 20.
Subassembly T	Subassembly T	Hold and index ramp, use with 23.
Subassembly V	Subassembly V	Locate ramp.
Subassembly Y	Subassembly Y	Hold and index structure, use with 151.
Subassembly AA	Subassembly AA	Hold and index structure, use with 151.
Subassembly AC	Subassembly AC	Hold and index structure.
Subassembly AE	Subassembly AE	Locate structure.
Subassembly AG	Subassembly AG	Locate upper former truss plane number 1, use with 157.
Subassembly AJ	Subassembly AJ/male laminate drill hood	Use to drill holes in new parts so they match fuselage fastener holes.
Subassembly AL	Subassembly AL/female laminate hole transfer hood	Transfer location of existing fastener holes from fuselage to subassembly AJ.
Subassembly AN	Subassembly AN/female laminate drill hood	Drill fastener holes in structure for cover 74A322609, use with 216.
Subassembly AR	Subassembly AR	Locate and drill attach holes in lower inlet structure.
Subassembly AT	Subassembly AT	Hold and index structure, use with 195.
Subassembly AV	Subassembly AV	Hold and index structure, use with 195.
Subassembly AY	Subassembly AY	Locate structure
Subassembly BA	Subassembly BA	Locate structure.
Subassembly BC	Subassembly BC	Hold and index inlet in maintenance fixture at Y442.000.
Subassembly BE	Subassembly BE	Hold and index inlet in maintenance fixture.
Subassembly BG	Subassembly BG	Hold and index inlet in maintenance fixture.
Subassembly BJ	Subassembly BJ	Locate structure for M.L.G.
Subassembly BL	Subassembly BL	Locate structure for M.L.G.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
Subassembly BN	Subassembly BN	Locate outboard longeron reference plane.
Subassembly BR	Subassembly BR	Locate longeron reference plane.
Subassembly BT	Subassembly BT	Scribe aft theoretical scribe line, duct skins.
Subassembly BV	Subassembly BV	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly BY	Subassembly BY	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CA	Subassembly CA	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CC	Subassembly CC	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CE	Subassembly CE	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CR	Subassembly CR	Locate hinge, use with 167.
Subassembly CT	Subassembly CT	Index inlet at Y395.000.
Subassembly CV	Subassembly CV	Initial holding subassembly at Y419.000.
20	Index pin	Hold and index ramp, use with R.
23	Index pin	Hold and index ramp, use with T.
113	Station support board	Hold many subassemblies and the inlet.
115	Station support board	Hold many subassemblies and the inlet.
117	Upper part	With lower part, 119, makes subassembly D.
119	Lower part	With upper part, 117, makes subassembly D.
121	Upper part	With lower part, 123, makes subassembly F.
123	Lower part	With upper part, 121, makes subassembly F.
134	Step pin	Hold subassembly H and structure together, use with CT.
141	Index pin	Hold and index structure, use with N.
151	Index pin	Hold and index structure, use with Y.
157	Angle	Locate upper truss plane number 1, use with AG.
158	Angle	Locate upper mid former truss plane number 2, use with AG.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
159	Angle	Locate lower former truss plane number 4, use with AG.
167	Index pin	Locate hinge, use with CR.
173-180	Shims	Use when picking up/transferring hole patterns, use with AJ/AL.
181	UNI-LOCK bushing liner	Accurate hole drilling provision.
182-186	Drill bushings	Maintain accurate base for drilling holes.
193-197	Index pins	Locate holes by indexing.
195	Index pin	Index and locate AR, use with AT.
199	Nurloc liner bushings	Allow accurate drilling of holes.
200-203	Index pins	Locate holes to be drilled.
204	Bushing	Provide accurate hole drilling.
209	Index pin	Index and hold structure.
211-214	Drill bushings.	Provide accurate hole drilling.
215	Index pin	Index attach holes in structure.
216	Index pin	Index attach holes in structure.
217	Index pin	Index and locate structure holes in upper LEX.
225-227	Drill bushings	Provide accurate hole drilling.
233	Shoulder screw.	Hold subassembly BC and inlet together.
236	Shoulder screw	Hold subassembly BE and inlet together.
246	Flat scribe.	Scribe lines, use with BV, BY, CA, CC, and CE.
280 and 281	Angle	Locate lower former truss plane number 4, use with AG.

a. Slide Y395.000 station support board, (detail 115), view A, forward to clear area required to lower inlet into maintenance fixture.

b. Slide Y442.000 station support board, (detail 113), view D, aft to clear area required to lower inlet into maintenance fixture.

c. Remove hardware holding upper part, (detail 121), of station support board, subassembly F, to lower part, (detail 123), of station support board, view B.

d. Remove hardware holding upper part, (detail 117), of station support board, subassembly D, to lower part, (detail 119), of station support board, view C.

e. Slide upper part of Y431.000 station support board, (detail 117), of subassembly D and upper part of Y419.000 station support board, (detail 121), of subassembly F aft to clear area required to lower inlet into maintenance fixture.

f. Maintain position of lower part of Y431.000 station support board, (detail 119), subassembly D and Y419.000 station support board, (detail 123), of subassembly F for supporting inlet when lowered into maintenance fixture.

g. Maintenance fixture is now correctly prepared to receive inlet.

4. REMOVAL OF INLET. See figure 3 and table 2. Damaged inlet must be removed from aircraft to allow major repair or replacement. Primary and secondary structure members are used to attach inlet to aircraft. Primary attach members are inlet formers at Y395.000, Y419.000, Y431.000, and Y442.000. Secondary

members include access covers, skin panels, drag beams, and inlet duct.

a. Remove number 1 fuel tank, F/A-18A, (A1-F18AC-460-300, WP010 00), and F/A-18B, (A1-F18AC-460-300, WP014 00).

b. Remove number 2 fuel tank, F/A-18A/B, (A1-F18AC-460-300, WP018 00).

c. Remove leading edge extension LEX (A1-F18AC-SRM-220, WP041 01).

d. Removal sequence for inlet:

(1) Remove all access covers/doors (A1-F18AC-LMM-010).

(2) Remove skins (A1-F18AC-SRM-230, WP009 00).

NOTE

Structure must be removed from fuselage along parting lines.

(3) Remove structure, as required, per table 2 and figure 3.

Table 2. Structure Removal

Part Number	Nomenclature	Location	Fastener
74A322105	Side Longeron	74A324202 at Y453.000 Bulkhead	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322109	Lower Cap, Support Beam	74A324105 Longerons, 74A322112 Plate	(6) ST3M415V3 Flush Titanium Hi-Loks.
74A322100	Web, Support Beam	74A322112 74A324105 74A324515 Longerons	(11) MS20470D Aluminum Rivets. (17) ST3M416 Titanium Hi-Loks.
74A322505	Lower Cap MLG Beam	74A324202	ST3M781 Flush Titanium Jo-Bolts.
74A322507	Web, MLG Beam	74A324202 74A324806 Stringer	(18) MS20470 Aluminum Rivets.

Table 2. Structure Removal

Part Number	Nomenclature	Location	Fastener
74A322500	Web	74A324202 74A322516 Bracket	(9) MS20470DD Rivets. (2) ST3M416V Titanium Hi- Loks.
74A322110	Lower Cap Inboard MLG Beam	74A324202	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322101	Diverter Plate	74A320632	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322510	Web Assembly	74A324202	(4) ST3M416V Titanium Hi- Loks.
74A322512	Longeron	74A324202	(2) ST3M415 Titanium Hi- Loks.
74A322400	Web Assembly	74A322510 74A322716 Bulkhead	(17) NAS673V5 Bolts
74A322131	Former Y442.000	74A324802 and 74A324804 Duct Skins	(81) ST3M748 Flush Alumi- num Rivets. (4) ST3M675 Flush Titanium Rivets. (6) NAS2706 Titanium Lock Bolts.

NOTE;

Rebuilt inlet configurations will be dependent upon aircraft configuration. This is due to large number of mating parts with non mating fastener patterns. Example: reinstallation of repaired inlet on same aircraft, attach fastener pattern will re-align, and undamaged mating parts need not be replaced. When repaired inlet will be cycled into spares for installation on another aircraft, all inlet/fuselage mating parts, exclusive of interchangeable access panels, must be replaced with blank components

(4) Disconnect pneumatic, hydraulic, and electrical system lines, which transmit interfuselage interface, per table 3.

(5) Cap/close any open system tubing/lines to prevent contamination.

NOTE

At this point, fasteners and structure members have been removed. Inlet remains attached to

fuselage at four inlet former stations. Inlet must be supported using engine air inlet beam type, installation/removal sling (sling).

(6) Install sling on inlet, sling is GFE.









(7) Support inlet with sling.

(8) Disconnect 74A322360 and 74A322361 supports by removing attaching hardware at either fuselage or inlet end of supports, see table 4.

Table 3. Component Removable

Nomenclature	Part Number	Remarks
Wire harness	WT M015	Detach
LCS Tubing	74A710620	Detach at Y395.000
Radar Coolant Tubing	74A835763	Detach at Y395.000
Secondary Ejector Duct	30A363	Detach
Outboard LE Flap Hydraulic Tubing	74A695816	Detach
ECS Duct Assembly	74A835629	Detach From Y419.000 Former
LE flap Drive Unit	74A670270	Remove

Table 4. Final Attachment Hardware

Part Number	Nomenclature	Location
NAS6710U25	Bolt	74A322360 
MS21084L10	Nut	74A322360 
NAS6710U26	Bolt	74A322361 
MS21084L10	Nut	74A322361 
NAS6610-24	Bolt	
MS21045L10	Nut	
NOTES  Fuselage attach.  Inlet attach.		

(9) Disconnect and remove 74A322351 support which is located at Y383.000 and installed between lower ramp and fuselage. Attaching hardware is NAS674V94D bolt, two AN960PD416 washers, and AN310-C4 nut.

(10) Remove 17 remaining close tolerance titanium bolts; 15 are NAS674 and two NAS675. This will free inlet from fuselage. Forward bolt, through ECS lip duct, installs into ST3M726C4M platenut, while remaining bolts are secured with NAS1291 self-locking CRES nuts. At this point inlet is free from fuselage, except for sealant.

NOTE

Engine air inlet installation alignment fixture (alignment fixture) must be used to stabilize inlet.

(11) Use alignment fixture to break sealant holding inlet to fuselage (A1-F18AC-SRM-230, WP041 00).

(12) Carefully move inlet forward to clear stovepipe, air inlet aft inner ducting.

5. INSTALLING INLET IN MAINTENANCE FIXTURE. See figure 4 and table 1.

a. Lower damaged inlet into maintenance fixture from top of maintenance fixture.

b. Secure inlet in maintenance fixture using subassembly CV, view A, at Y419.000 station support board, (detail 123).

c. Remove sling.

d. Move upper part of Y419.000 station support board, subassembly F, (detail 121), figure 1, view B, forward into position over lower part.

e. Move upper part of Y431.000 station support board, subassembly D, (detail 117), view C, forward into position over lower part.

f. Secure upper and lower parts of Y419.000 and Y431.000 station support boards in correct position using supplied hardware.

g. Slide Y395.000 station support board (detail 115) aft and index and fasten at original station location.

h. Slide Y442.000 station support board, (detail 113) forward and index and fasten at original station location. Maintenance fixture is now ready to position and check inlet for damaged structure.

NOTE

Position of inlet in maintenance fixture depends upon condition of 74A322331 former at Y442.000 and 74A322341 former at Y395.000 not being damaged.

i. Position inlet in maintenance fixture at aft station Y442.000 using subassemblies BC, BE, and BG, figure 4, views C, D, and E, attached to Y442.000 station support board, (detail 113), view B.

j. Position forward end of inlet at station Y395.000, using subassembly H, view G, attached to (detail 115), view F, station support board, with step pin, (detail 134).

6. IDENTIFICATION OF INLET STRUCTURE TO BE CHECKED, REMOVED, REPAIRED, OR REPLACED.

a. Ramp assembly, 74A322720; which includes-pin, 74A322409, at Y383.000 and former, 74A322301, at Y395.000.

b. Former assembly, 74A322341; which includes former, 74A322300, at Y395.000 for LEX.

c. Support, 74A322302; with-spherical bearing ST4M212-19, for former, 74A322341, at Y395.000 for LEX.

d. Former 74A322311, at Y419.000.

e. Upper former, 74A322402, for truss plane number 1 between Y395.000 and Y419.000.

f. Upper mid. former, 74A322403, for truss plane number 2 between Y395.000 and Y419.000.

g. Lower mid. former, 74A322403, for truss plane number 3 between Y395.000 and Y419.000.

h. Lower former, 74A322405, for truss plane number 4 between Y395.000 and Y419.000.

i. Former, 74A322321, at Y431.000.

j. Former, 74A322331, at Y442.000.

k. Support, 74A322363, at Y395.000 for hinge of door, 74A322659, of LEX.

l. Inboard MLG drag beam; consisting of inner cap, 74A322107, and outer cap, 74A322500, webs.

m. Outboard MLG drag beam consisting of outer cap, 74A322506, and inner cap, 74A322507, webs.

n. Lower outboard longeron consisting of inner cap, 74A322108, outer cap, 74A322109 and 74A322100, webs.

o. Slide longeron, 74A322105, at Z91.500.

7. CHECKING, REMOVING, REPLACING, OR REPAIRING OF DAMAGED INLET STRUCTURE. See figure 5 and table 1.

a. Ramp assembly, 74A322341; which includes-pin, 74A322409, at Y383.000 and former, 74A322301, at Y395.000.

(1) Use subassembly T, view B, attached to station support board, (detail 115), view A, and weld assembly, index pin, (detail 23) for location of ramp assembly at X28.360, Y394.200, and Z114.800.

(2) Use subassembly R, view C, attached to station support board, (detail 115) and weld assembly, index pin, (detail 20), for location of ramp assembly at X20.000, Y395.000, and Z82.500.

(3) Use subassembly V, view D, attached to station support board, (detail 115) for location of ramp assembly at X27.701 which is center of pin, 74A322409, protruding above upper edge of ramp assembly at Y383.000.

b. Former assembly, 74A322341; which includes former, 74A322300, at Y395.000 for LEX at Y395.000.

(1) Use subassembly H, view E, attached to station support board, (detail 115) for location of former at X49.000, Y395.000, and Z110.800.

(2) Use subassembly N, view F, attached to station support board, (detail 115) and index pin, (detail 141) for location of former at X31.118, Y395.000, and Z112.855.

(3) Use subassembly K, view G, attached to station support board, (detail 115) for location of former at Y395.000.

c. Support, 74A322302, with-spherical bearing, ST3M212-19, for former assembly, 74A322341, at Y395.000 for LEX. Use subassembly H, view E, attached to station support board, (detail 115) and index pin, (detail 134) for location of bearing in support at X49.000, and Z110.800.

d. Former, 74A322311 at Y419.000.

(1) Use subassembly Y, view J, attached to subassembly F, station support board, view H, and index pin, (detail 151), for location of former at X28.100, Y419.120, and Z108.080.

(2) Use subassembly AA, view K, attached to subassembly F, station support board and index pin, (detail 151) for location of former at X23.000, Y419.120, and Z76.000.

(3) Use subassembly AC, view L, attached to subassembly F, station support board, view H, for location of former Y419.050.

(4) Use subassembly AE, view M, attached to subassembly F, station support board for location of former at Y419.000.

e. Upper former, 74A322402, for truss plane number 1 between Y395.000 and Y419.000. Use subassembly AG, view H, attached to subassembly F, station support board and angle, (detail 157) for location of upper former at truss plane number 1.

f. Upper mid former, 74A322403, for truss plane number 2 between Y395.000 and Y419.000. Use subassembly AG attached to subassembly F, station support board and angle, (detail 158) for location of upper mid former at truss plane number 2.

g. Lower mid former, 74A322404, for truss plane number 3 between Y395.000 and Y419.000. Use subassembly AG attached to subassembly F, station sup-

port board, and angle, (detail 159) for location of lower mid former at truss plane number 3.

h. Lower former, 74A322405, for truss plane number 4, between Y395.000 and Y419.000. Use subassembly AG attached to subassembly F, station support board and angle, (details 280 and 281) for location of lower former at truss plane number 4.

i. Former, 74A322321, at station Y431.000.

(1) Use subassembly AT, view P, attached to subassembly D, station support board, view N, and index pin, (detail 195) for location of former at X26.500, Y431.080, and Z106.000.

(2) Use subassembly AV, view R, attached to subassembly D, station support board and index pin, (detail 195) for location of former at X25.000, Y431.120, and Z75.000.

(3) Use subassembly AY, view S, attached to subassembly D, station support board for location of former at Y431.050.

(4) Use subassembly BA, view T, attached to subassembly D, station support board for location of former at Y431.050.

j. Former, 74A322331, at Y442.000.

(1) Use subassembly BC, view V, attached to station support board, (detail 113), view U, and index shoulder screw, (detail 233) for location of former at X25.000, Y442.100, and Z101.000.

(2) Use subassembly BE, view W, attached to station support board, (detail 113) and index shoulder screw, (detail 236) for location of former at X24.000, Y442.000, and Z75.500.

(3) Use subassembly BG, view X, attached to station support board, (detail 113) for location of former at Y442.000.

k. Support, 74A322363, at Y395.900, which is part of former assembly, 74A322341, and supports hinge of door, 74A322659, of LEX. Use subassembly CR, view Y, attached to station support board, (detail 113) and 2 index pins, (detail 167) for location of hinge at Y395.000.

l. Inner cap, 74A322107, and outer cap, 74A322110, of inboard MLG drag beam. Use

subassembly BJ, view Z, attached to station support board, (detail 113) for location of inner cap and outer cap to inboard MLG trunnion drag beam reference plane and aft end of part.

m. Outer cap, 74A322505, of outboard MLG drag beam. Use subassembly BL, view AA, attached to station support board, (detail 113) for location of outer cap to outboard MLG trunnion drag beam reference plane and aft end of part.

n. Outer cap, 74A322109, of lower outboard longeron. Use subassembly BN, view AB, attached to station support board, (detail 113) for location of outer cap to lower outboard longeron reference plane and aft end of part.

o. Longerons, 74A322105, of side longerons at Z91.500. Use subassembly BR, view AC, attached to station support board, (detail 113) for location of longeron reference plane which is Z91.500 and aft end of part.

p. At this point depot personnel may do required removal, replacement, or repair of damaged inlet structure using approved procedures and quality workmanship. For hole preparation (A1-F18AC-SRM-200, WP004 16).

8. SCRIBING AFT THEORETICAL SPLICE LINE ON INNER AND OUTER DUCT SKINS. See figure 6 and table 1. After installing inner duct skin, 74A322800, and outer duct skin, 74A322801, use subassembly BT, view A, attached to station support board, (detail 113) and flat scribe, (detail 246), view G, for scribing aft theoretical splice line, aft trim, on both inner and outer skins at Y442.000.

9. SCRIBING AFT THEORETICAL SPLICE LINE ON SKINS OR SKIN ASSEMBLIES, 74A322710. Use following subassemblies for scribing aft theoretical splice line, aft trim, on installed skins or skin assemblies, 74A322710;

a. Skin assemblies, 74A322710-1039 and -1041; use subassembly BV, view D, attached to station support board, (detail 113).

b. Slide diverter, 74A322710-2111, -2147, -2181, or -2183; use subassembly BY, view B, attached to station support board, (detail 113).

c. Skin assemblies, 74A322710-1019 and -1029; use subassembly CA, view E, attached to station support board, (detail 113).

d. Skin assembly, 74A322710-1037; use subassembly CC, view F, attached to station support board, (detail 113).

e. Side diverter skins, 74A322710-2007 and -2111; use subassembly CE, view C, attached to station support board, (detail 113).

10. SEPARATION OF INLET INTO FOUR UNITS FOR ACCESSIBILITY WHILE REWORKING. See figure 7 and table 1.

NOTE

Three of four station support boards have alternate locations and index other than original location.

S -113 station support board -Y495.000

S subassembly D, station support board-Y463.000

S -115 station support board -Y378.000

a. Former, 74A322331, at Y442.000 and all structure between Y431.000 and Y453.000. All structure is attached to station support board, view A, (detail 113) at Y454.500.

b. Former, 74A322321, at Y431.000 and all structure between Y419.000 and Y431.000. All locators are attached to station support board, subassembly D, view B, (details 117 and 119) at Y433.500.

c. Former 74A322311, at Y419.000 and all structure between Y395.000 and Y419.000. All locators are attached to station support board, subassembly F, (details 121 and 123) at Y422.500.

d. Ramp Assembly, 74A322720, which includes former, 74A322301, at Y395.000 and former, 74A322341, for LEX at Y395.000. All locators are attached to station support board, (detail 115), view D, at Y398.000.

11. REPAIR TO INLET FOR INSTALLATION ON SAME AIRCRAFT. See figure 8. If inlet is to be reinstalled on same aircraft and if any structure of inlet carrying fuselage attach holes was replaced, female laminate hole transfer hood, subassembly AL, view A, and male laminate drill hood, subassembly AJ, view C, will be required to locate fastener holes on new structure.

NOTE

Subassembly AL is a loose assembly. It is used only for transferring location of existing holes from fuselage to subassembly AJ. These subassemblies are used on maintenance fixture for drilling attach holes into new structure, of inlet, replaced because of damage.

a. The maintenance fixture allows existing fuselage holes to be picked up by using subassembly AL along with index pins, (details 200 through 203), view D and table 5, along with potable nurloc liner bushings, (detail 199) and table 6.

b. Position subassembly AL before potting of nurloc liner bushings, (detail 199) and table 6. Index subassembly to forward attach hole at Y387.500 and Z97.043, coordinate aft tooling ball for Z location only along mating mold line surfaces.

c. Following substeps are used for transferring fuselage hole pattern from subassembly AL to subassembly AJ before drilling holes into replaced structure.

(1) Remove aluminum shims, (details 173 through 180) and table 8, from subassembly AJ.

(2) Coordinate subassembly AJ to subassembly AL by pinning two index pins, (detail 167), view D, through bushings, (detail 204) of both subassemblies.

(3) Use index pins, (details 200 through 203) for potting UNI-LOCK bushing liners, (detail 181) into subassembly AJ from existing bushed holes in subassembly AL.

(4) Pot bushings (A1-F18AC-SRM-200, WP004 16), Hole Locating Plate Set Accessory Kit, RE374000002-1.

(5) After potting bushings into subassembly AJ reinstall aluminum shims, (details 173 through 180) and table 8, into subassembly AJ.

d. Prepare maintenance fixture, subassembly B, see figures 1 and 2, per substeps below, before drilling attach holes into new inlet structure.

(1) Remove upper half of station support boards, subassemblies D and F, (details 117 and 121) from maintenance fixture or slide clear of area as shown in figure 1.

(2) Locate and index inlet at Y442.000, see figure 5, to subassemblies BC, BE, and BG views V, W, and X.

(3) See figure 1. Slide station support board (detail 115) forward to clear subassembly AJ when installed.

(4) Install subassembly CT on maintenance fixture, subassembly B, and index inlet at Y395.000 to subassembly CT using index pin, (detail 134).

(5) Install subassembly AJ onto maintenance fixture, subassembly B, and locate subassembly AJ to inlet by indexing any existing attach holes in inlet using index pins, (details 193 through 197) and table 7, along with mold line surfaces. If all fastener holes need to be drilled out in inlet, then use tooling ball reference system of subassembly AJ for location to inlet along with mating mold line surfaces.

e. Drill all required attach holes in inlet using drill bushings, (details 182 through 186) and index pins, (details 193 through 197) in subassembly AJ, view C.

12. REPAIR TO INLET BEING SPARED. If inlet being repaired is to be spared for future use on another aircraft structure with 16 or 17 fuselage fastener attach holes, must be replaced and left blank, not drilled.

13. USING MAINTENANCE FIXTURE FOR LOCATING AND DRILLING ATTACH HOLE PATTERN IN UPPER LEX SUBSTRUCTURE FOR ACCESS COVER, 74A322609. See figure 9.

a. Use following two methods for locating subassembly AN, view A, on upper LEX substructure of intake before drilling hole pattern for access cover, 74A322609, located between Y419.000 and Y431.000, using female laminate drill hood, subassembly AN.

(1) Locate subassembly AN on substructure of upper LEX by indexing into any existing attach holes, farther apart the better, using index pin, (detail 216) and mate mold line with surfaces.

(2) If all attach holes in substructure of upper LEX need to be drilled, locate subassembly AN at aft end against former, 74A322320, two places, with index pin, (detail 217) and against longeron, 74A322106, one place, with index pin, (detail 209) and mate with mold line surfaces.

b. Drill all required attach holes in substructure of upper LEX for access cover, 74A322609, using drill bushings, (details 211 through 214) and index pins, (details 215 and 216) in subassembly AN.

14. USING MAINTENANCE FIXTURE FOR LOCATING AND DRILLING ATTACH HOLE PATTERN IN LOWER INLET SUBSTRUCTURE FOR ACCESS COVER, 74A322680, BETWEEN Y442.000 AND Y453.000, AFTER INLET IS INSTALLED. See figure 10. Use subassembly AR and following steps;

a. Locate subassembly AR, on substructure of lower inlet by pinning, index pins, (detail 195), into tooling holes number 35 and 39 in bulkhead, 74A324202, at Y453.000.

b. Index any existing holes of substructure which was not replaced.

c. Drill all required holes in substructure of inlet using drill bushings, (details 225 through 227), and index pins, (detail 195).

15. REMOVING INLET FROM MAINTENANCE FIXTURE. See figure 4.

a. Remove subassembly H, view G, from (detail 115), view F, station support board at Y395.000, by removing step pin, (detail 134).

b. Remove subassemblies BC, BE, and BG, views C, D, and E from Y442.000 station support board, (detail 113), view B.

c. Remove any other subassemblies, step pins, or index pins that may still be attached to station support boards or structure.

d. Slide Y395.000 station support board, (detail 115), view A, forward to clear area required to raise inlet from maintenance fixture.

e. Slide Y442.000 station support board, (detail 113), view D, aft to clear area required to raise inlet from maintenance fixture.

f. Remove hardware holding upper part, (detail 121), of station support board, subassembly F, to lower part, (detail 123), view B.

g. Remove hardware holding upper part, (detail 117), of station support board, subassembly D, to lower part, (detail 119), view C.

h. Slide upper part of Y431.000 station support board, (detail 117), of subassembly D and upper part of Y419.000 station support board, (detail 121), of subassembly F aft to clear area required to raise inlet from maintenance fixture.

i. Maintain position of lower part of Y431.000 station support board, (detail 119), subassembly D and Y419.000 station support board, (detail 123), of subassembly F for supporting inlet until raised out from maintenance fixture.

j. Inlet is now ready to be removed from maintenance fixture.

k. Attach sling.

l. Take up slack in sling so subassembly CV, view A at Y419.000 station support board, (detail 123) can be removed.

m. Remove inlet from maintenance fixture.

16. REINSTALLING INLET ON AIRCRAFT.

a. Install inlet in alignment fixture (A1-F18AC-SRM-230, WP041 00).

b. Carefully move alignment fixture, with inlet installed, into position for installation, just forward of stovepipe, air inlet aft inner ducting.

c. Apply sealing compound, as required, when mating inlet to fuselage, as specified in specific structure repair manual.

d. Install 17 close tolerance titanium bolts; 15 are NAS674 and two are NAS675. This will attach inlet to fuselage. Forward bolt, through ECS lip duct, installs into ST3M726C4M platenut, while remaining bolts are secured with NAS1291 self-locking CRES nuts.

e. Attach 74A322351 support, which is located at Y383.000 and installed between lower ramp and fuselage. Attaching hardware is NAS674V94D Bolt, two AN960PD416 washers, and AN310-C4 nut.

NOTE

At this point, inlet is attached to fuselage at four inlet former stations. Inlet no longer requires support from sling.

f. Remove sling.

g. Connect pneumatic, hydraulic, and electrical systems lines, which transmit interfuselage interface, per table 3.

h. Reinstall structure, as required, per table 2 and figure 3.

i. Reinstall skins (A1-F18AC-SRM-230, WP009 00).

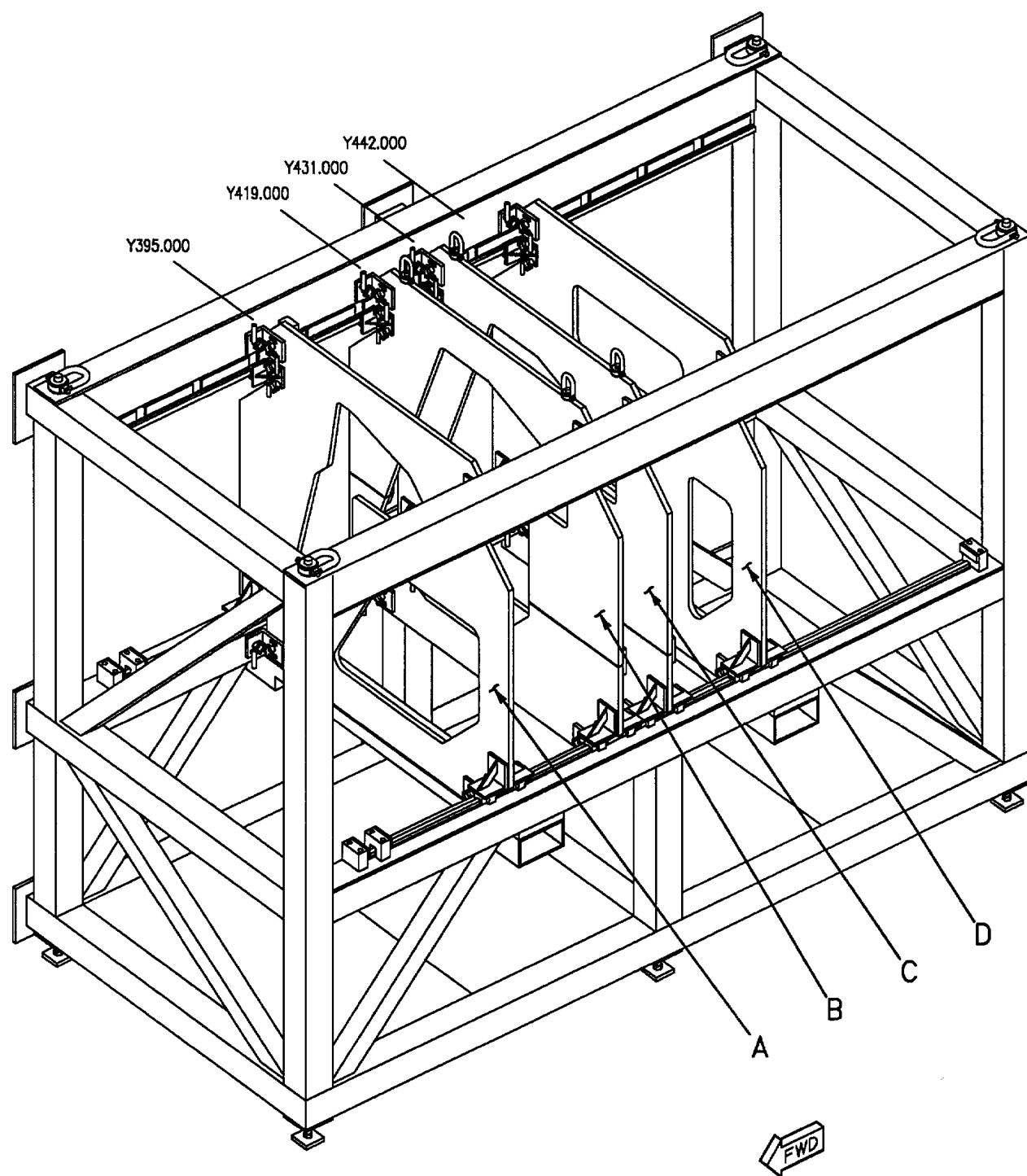
j. Reinstall all inlet access covers/doors (A1-F18AC-LMM-010).

k. Reinstall leading edge extension (A1-F18AC-SRM-220, WP041 01).

l. Reinstall number 2 fuel tank, F/A-18A/B, (A1-F18AC-460-300, WP019 00).

m. Reinstall number 1 fuel tank, F/A-18A, (A1-F18AC-460-300, WP011 00), and F/A-18B, (A1-F18AC-460-300, WP015 00).

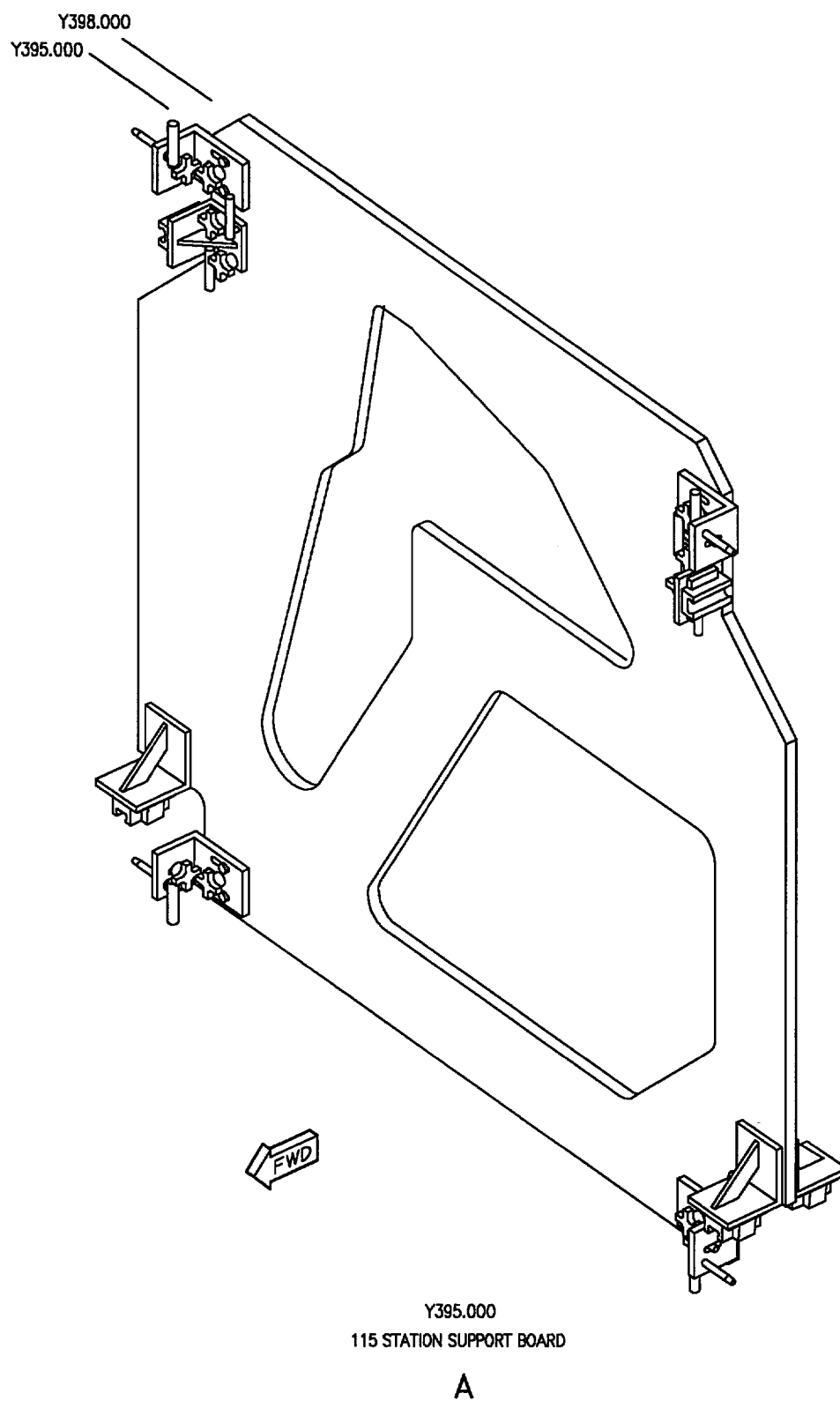
n. Apply finish system, as required, (A1-F18AC-SRM-500, WP030 00).



SUBASSEMBLY B
LEFT INLET

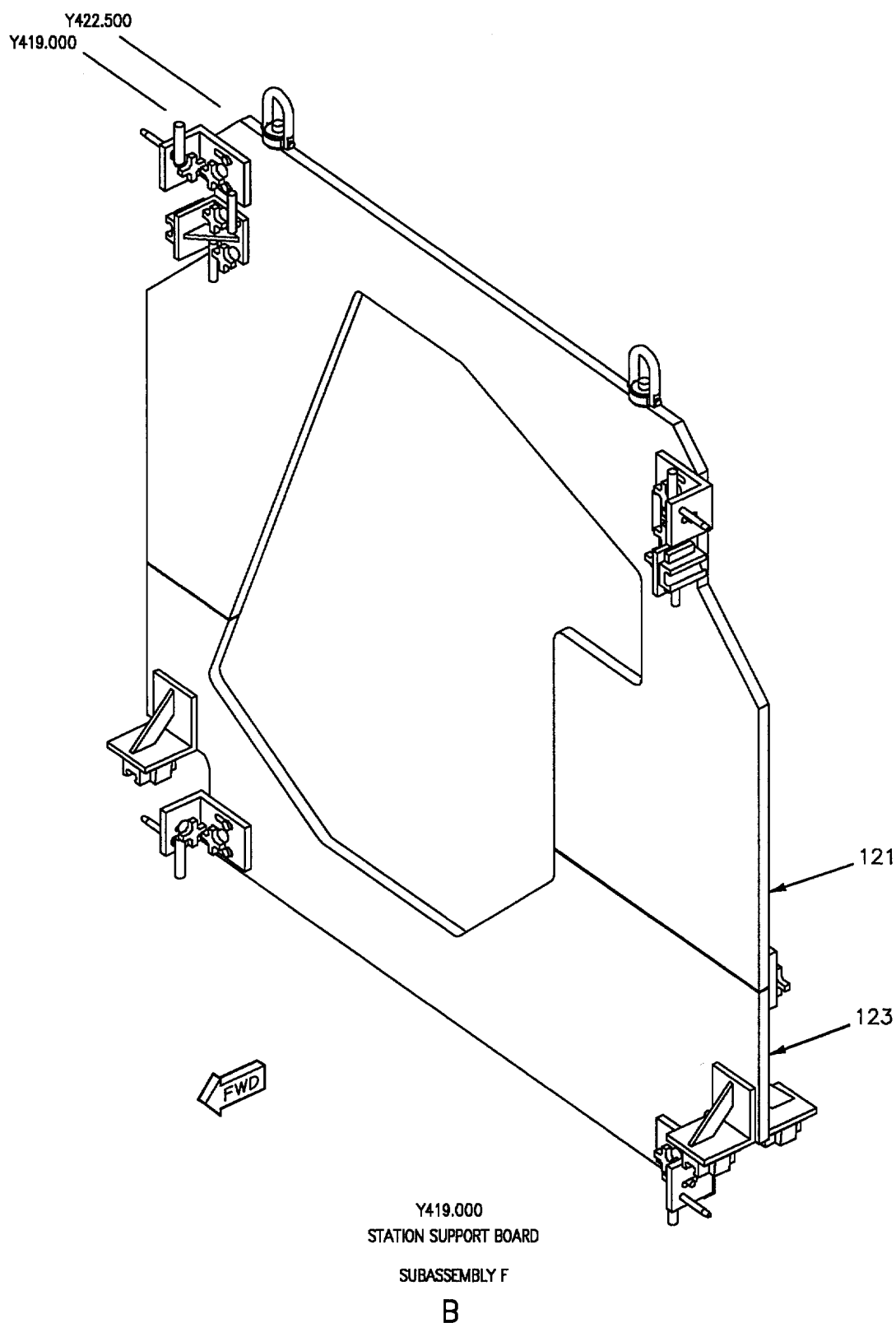
Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-1 (Sheet 1)

03900101



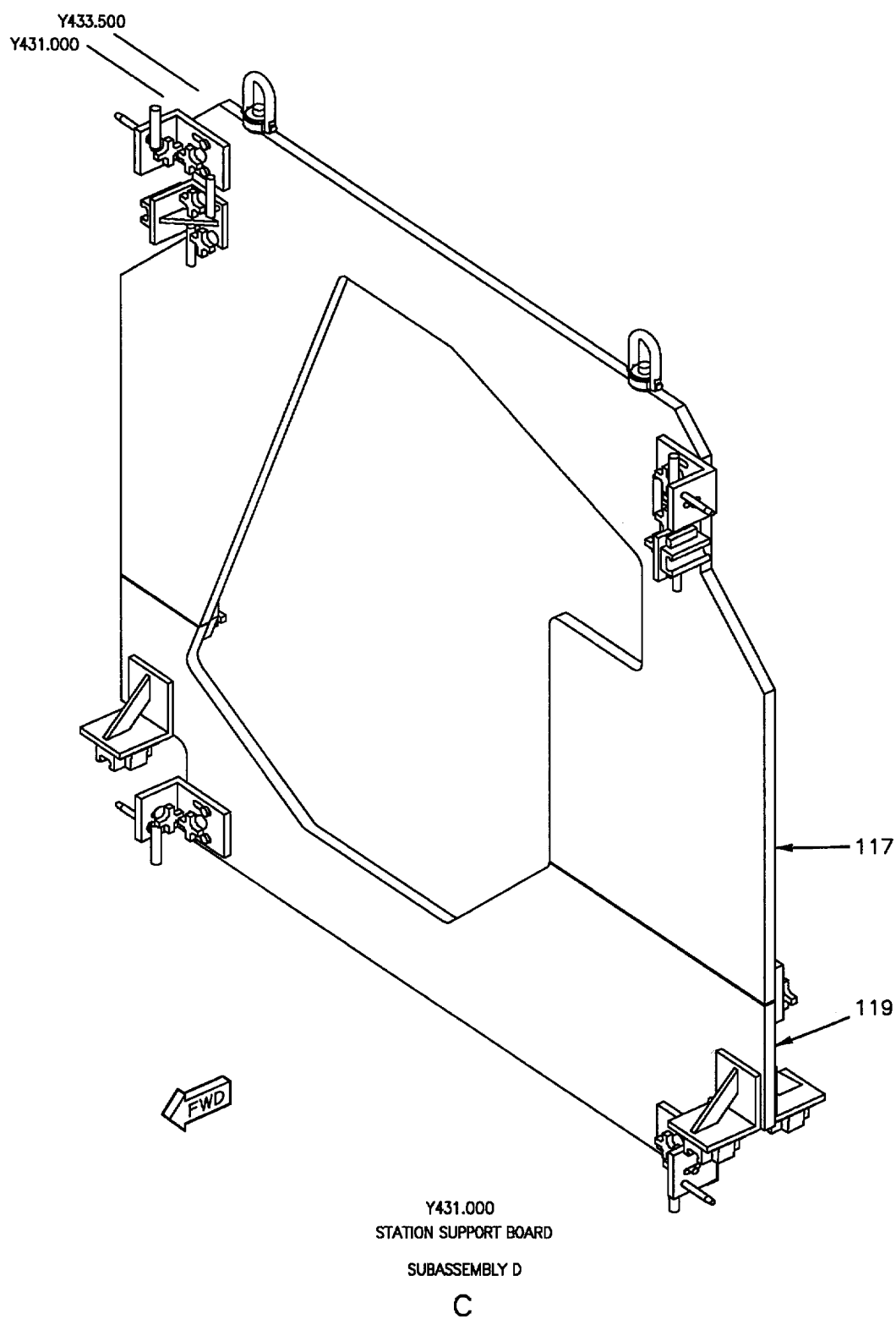
03900102

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-1 (Sheet 2)



03900103

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-1 (Sheet 3)



03900104

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-1 (Sheet 4)

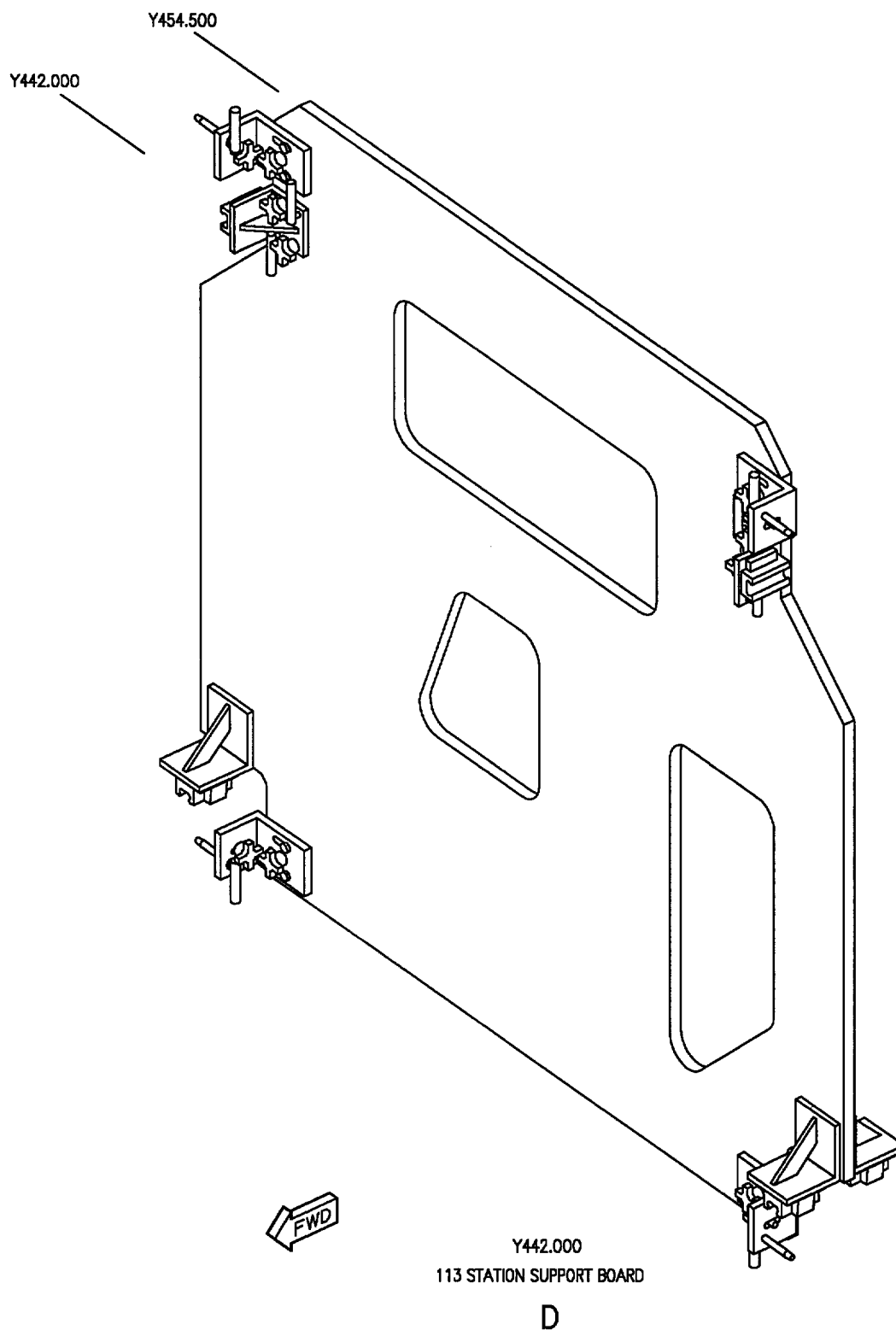


Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-1 (Sheet 5)

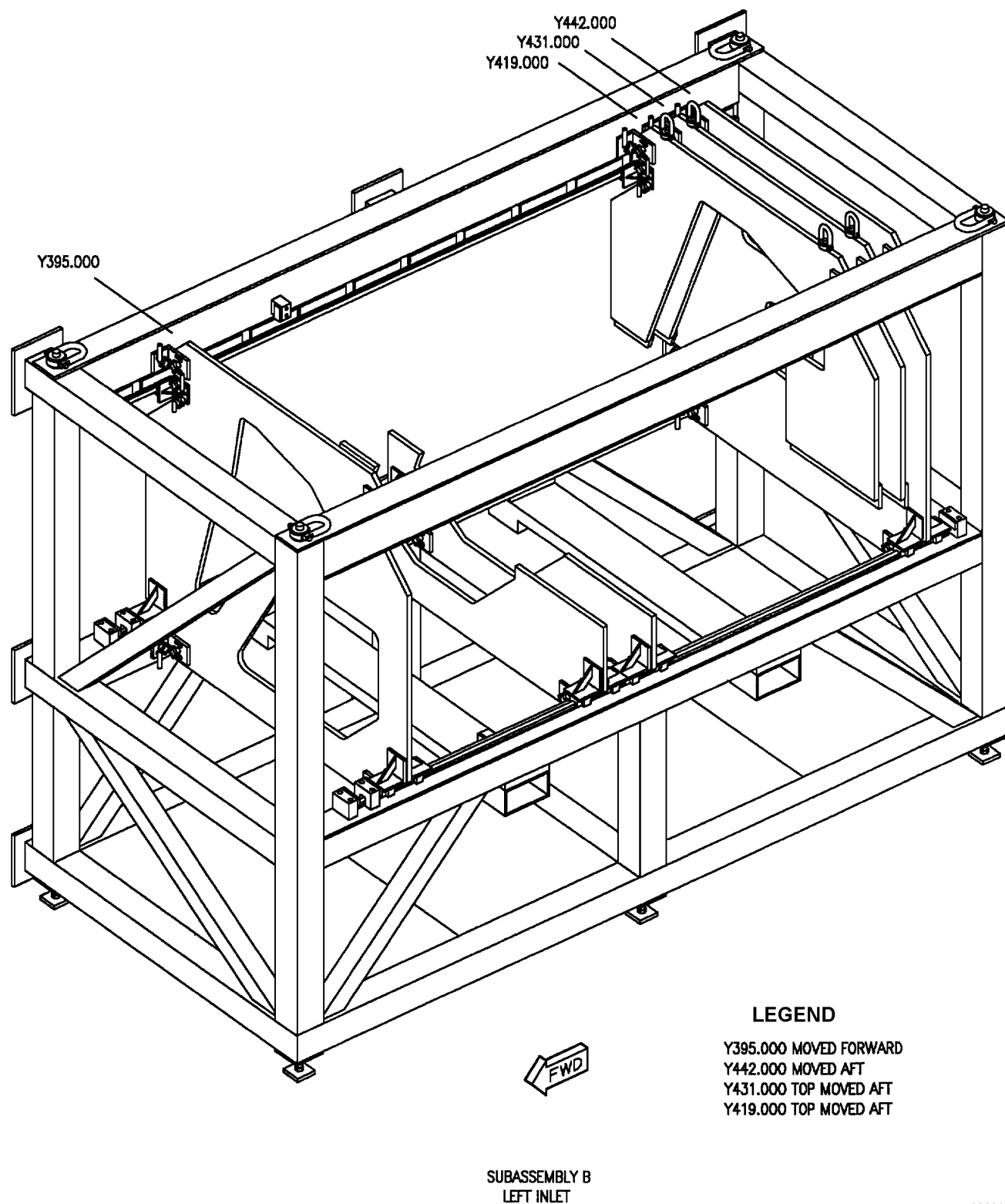


Figure 2. Engine Air Inlet Maintenance Fixture, Station Support Boards Prepared for Inlet

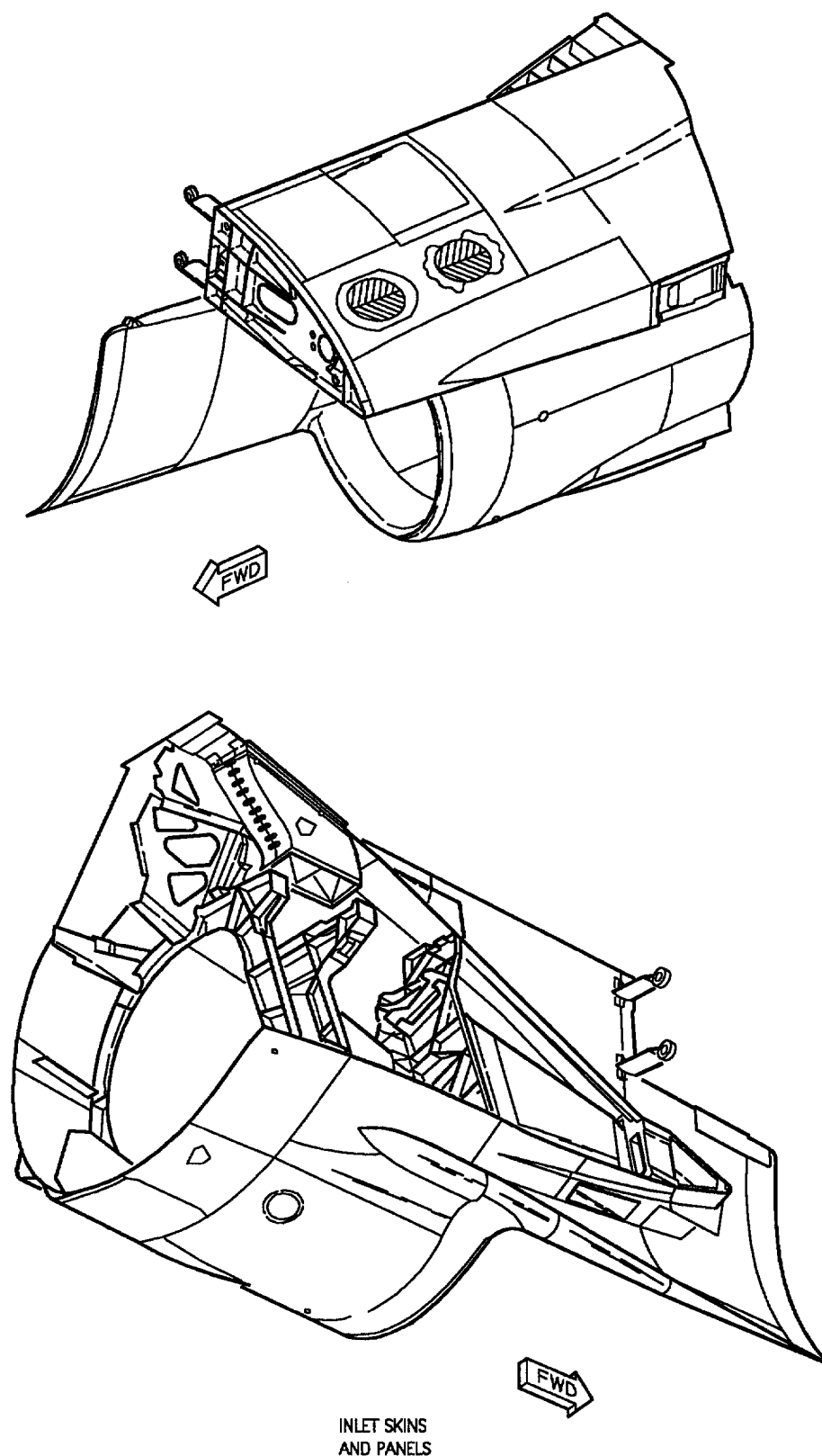


Figure 3. Removal of Inlet (Sheet 1)

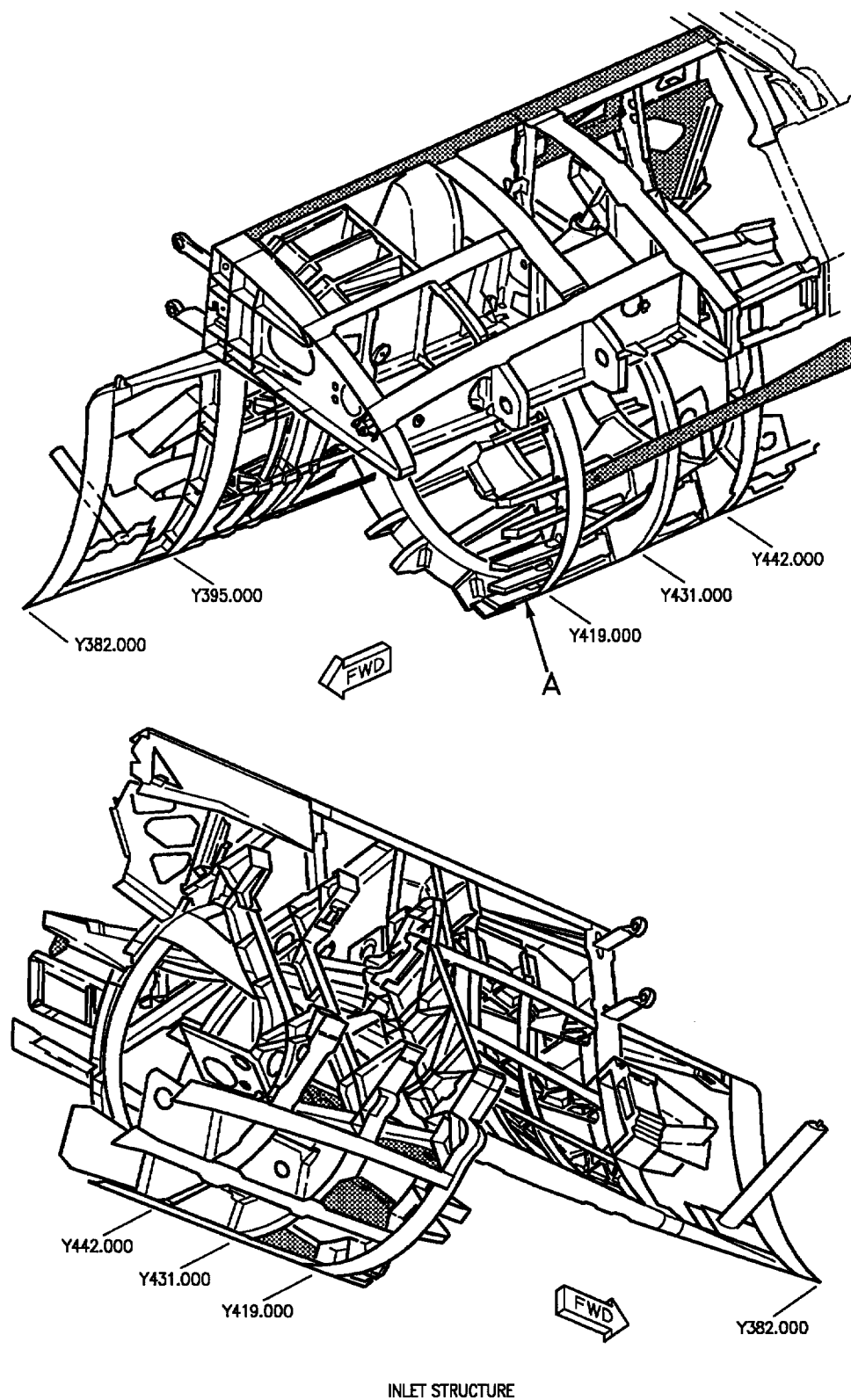
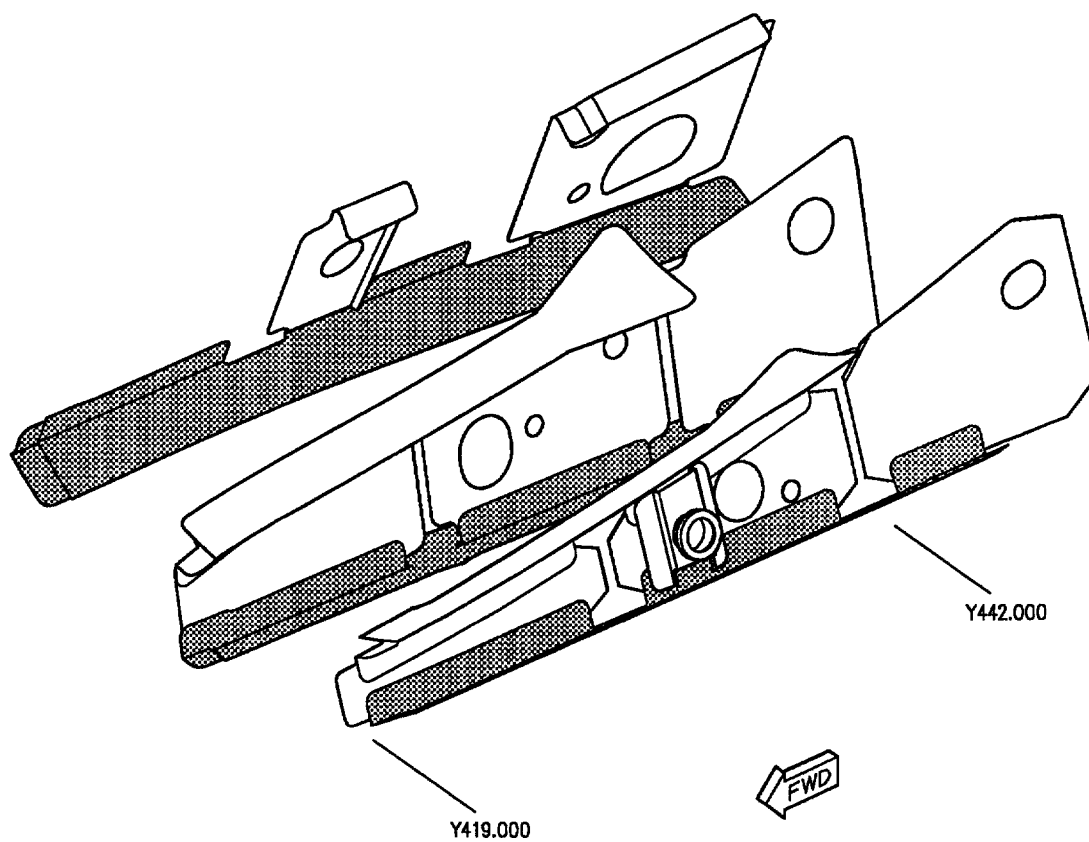


Figure 3. Removal of Inlet (Sheet 2)



A

Figure 3. Removal of Inlet (Sheet 3)

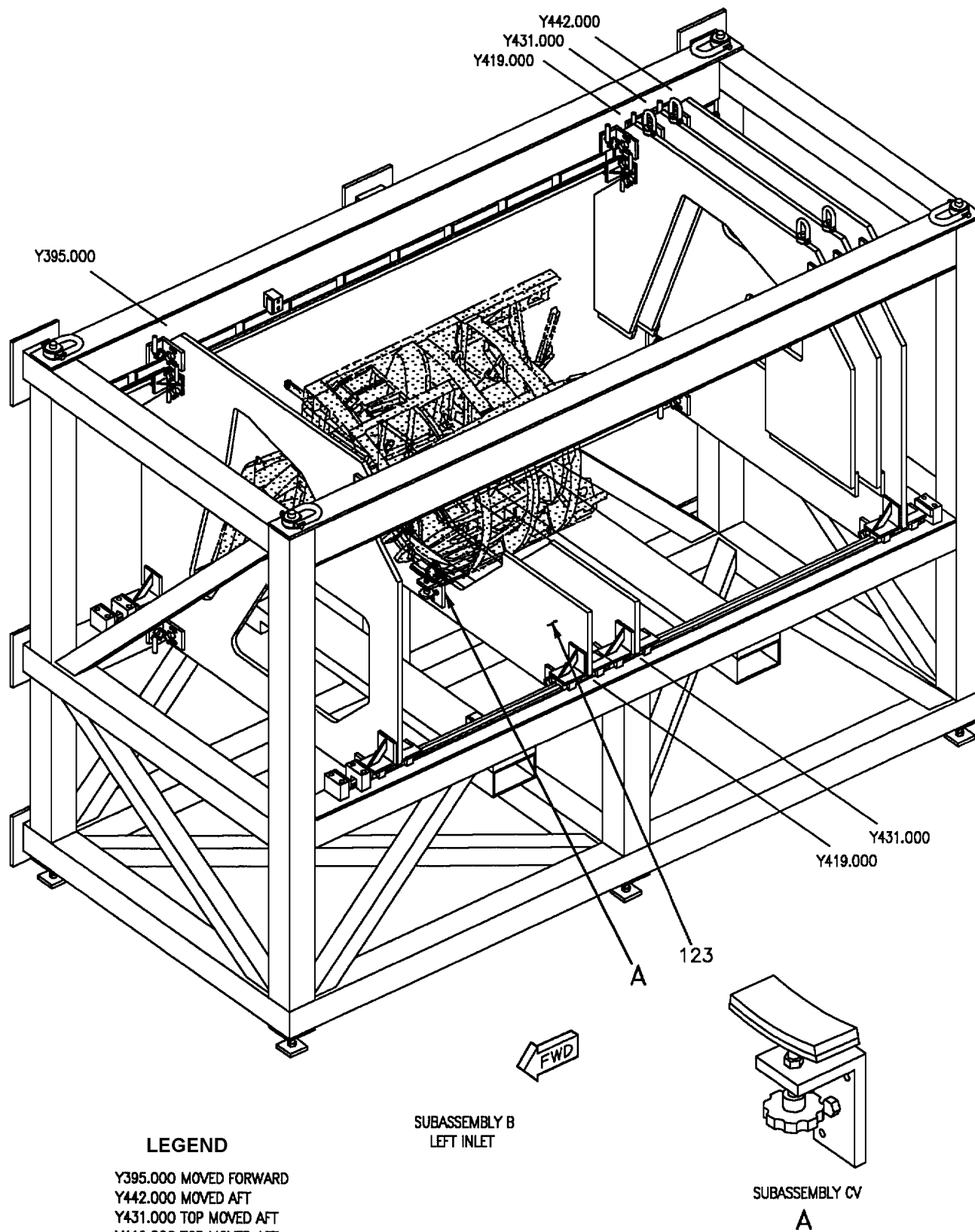
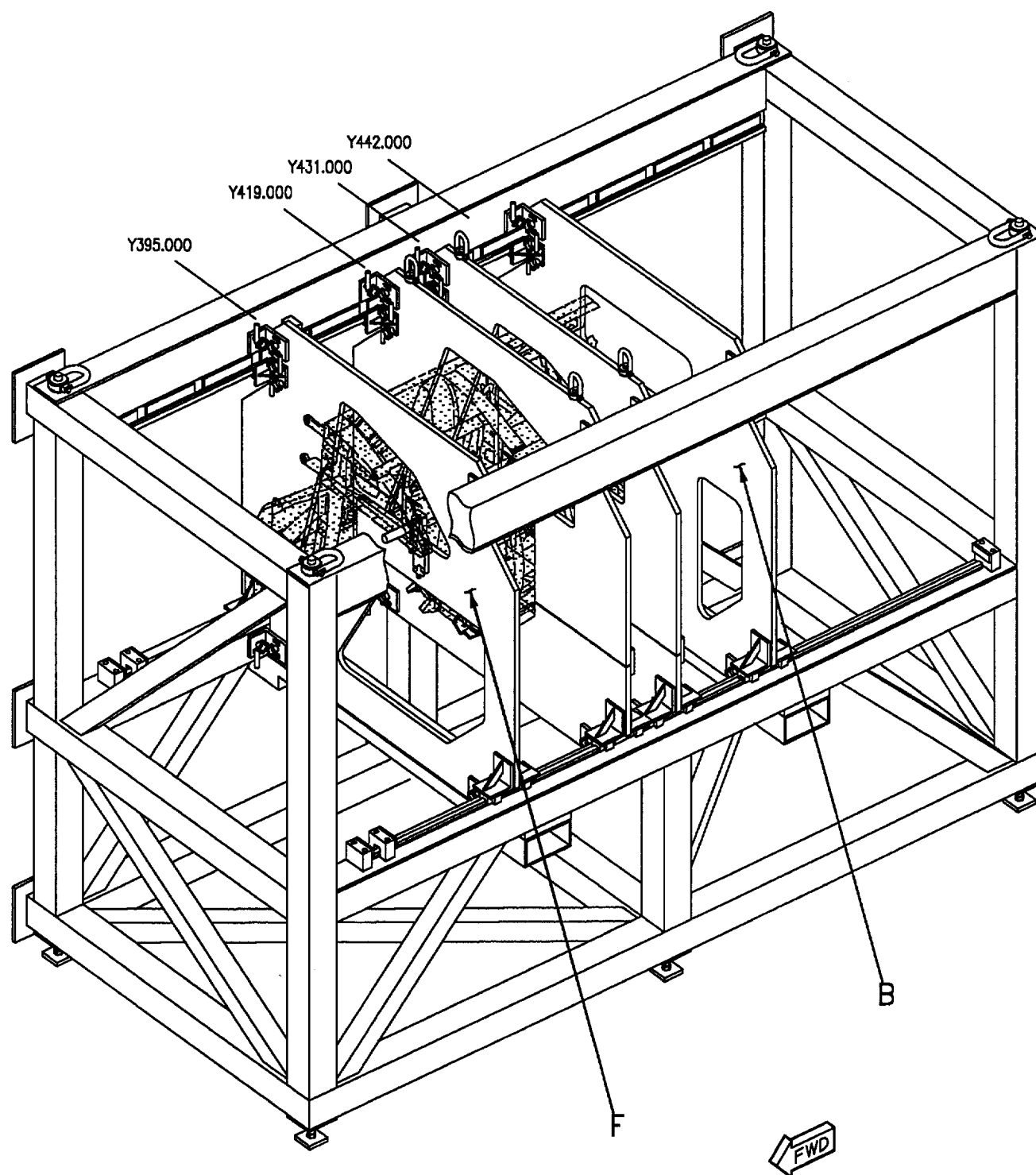


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 1)



INLET INSTALLED IN MAINTENANCE FIXTURE
SUBASSEMBLY B
LEFT INLET

Figure 4. Installing Inlet in Maintenance Fixture (Sheet 2)

03900402

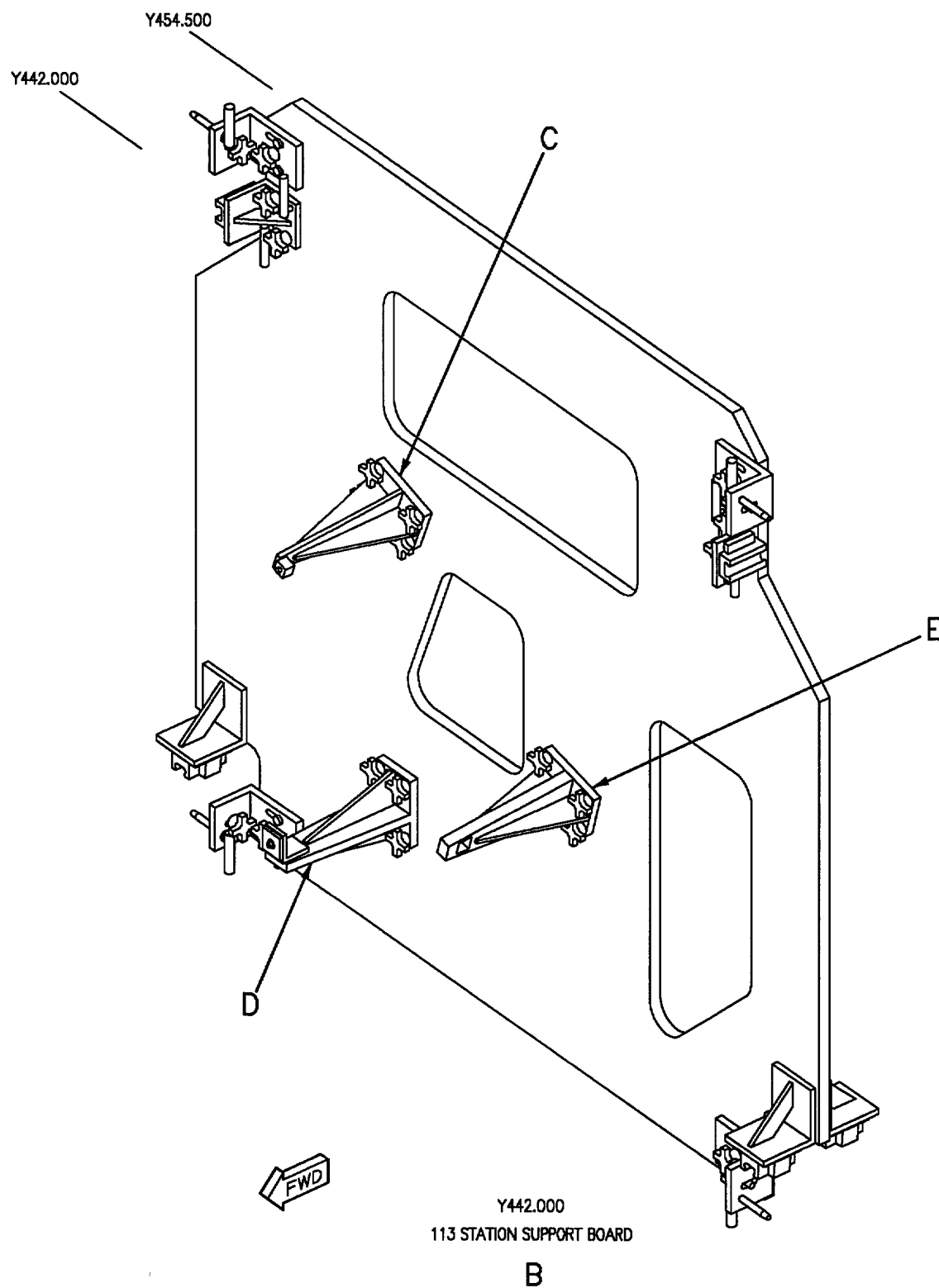
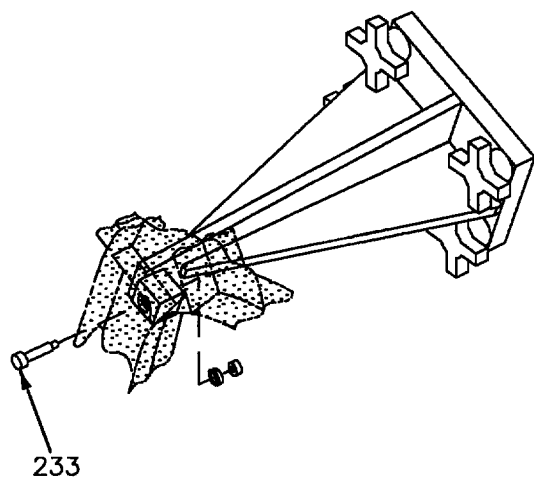
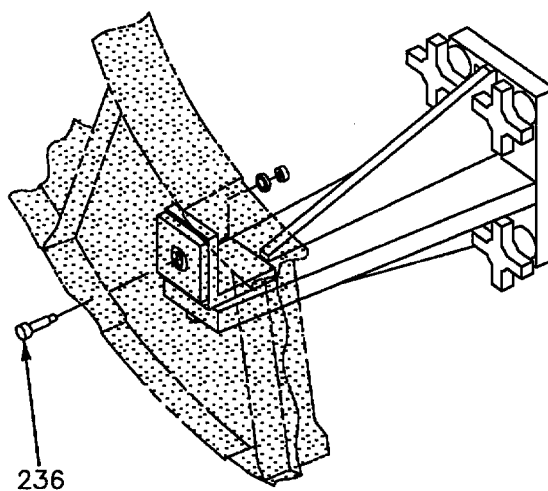


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 3)



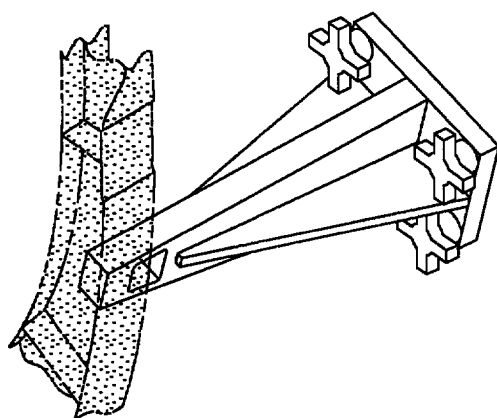
SUBASSEMBLY BC

C



SUBASSEMBLY BE

D



SUBASSEMBLY BG

E

Figure 4. Installing Inlet in Maintenance Fixture (Sheet 4)

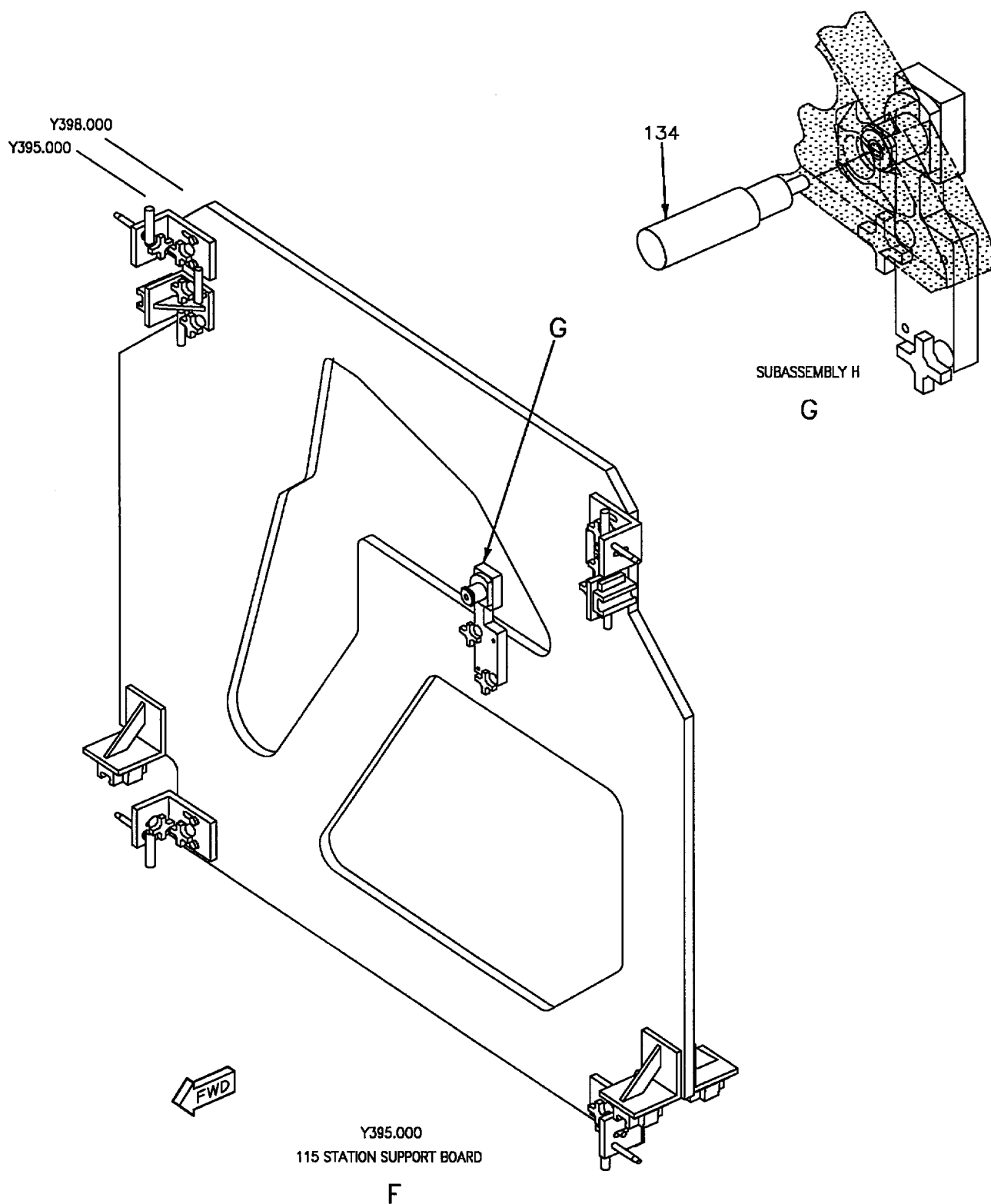


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 5)

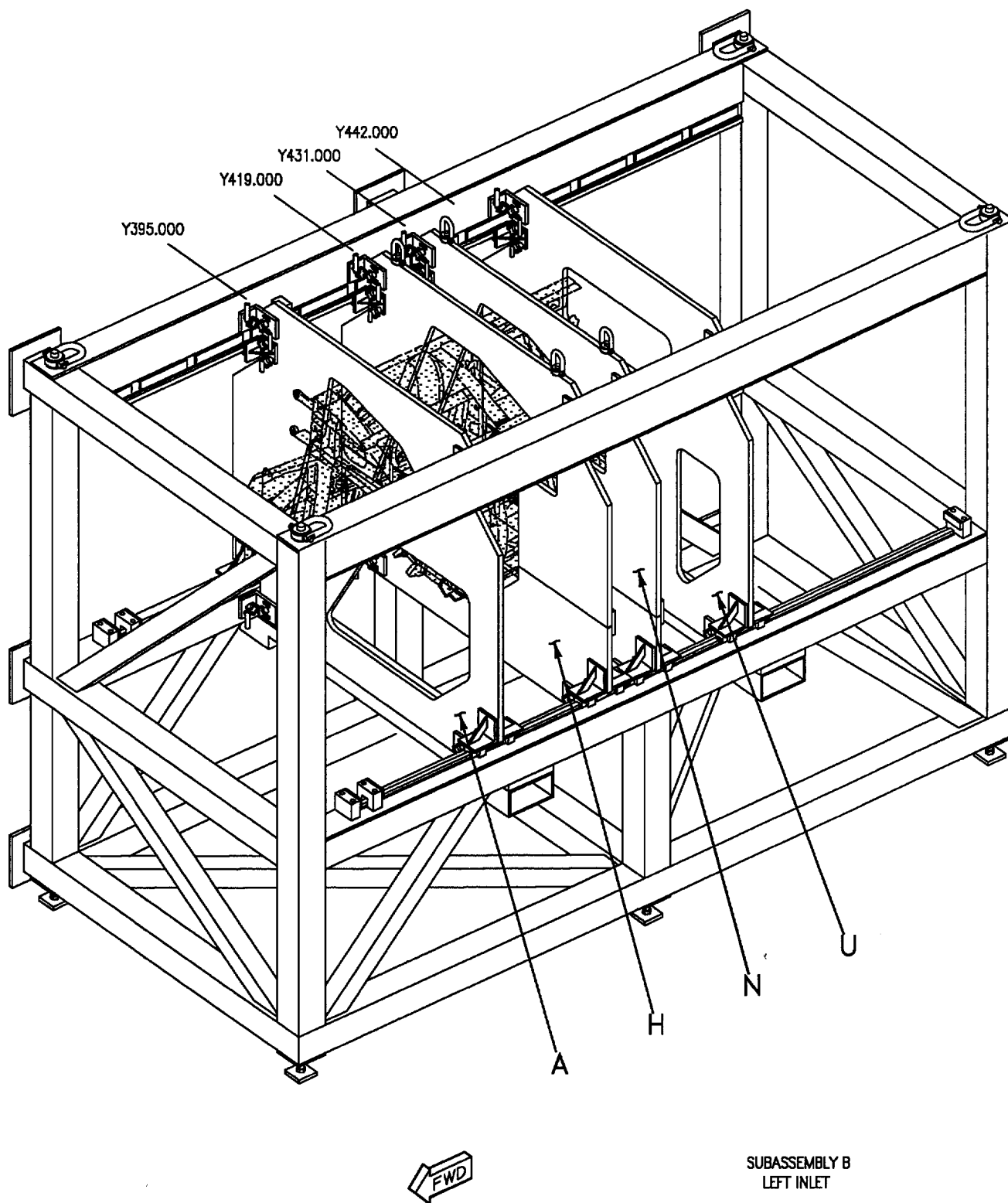


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 1)

03900501

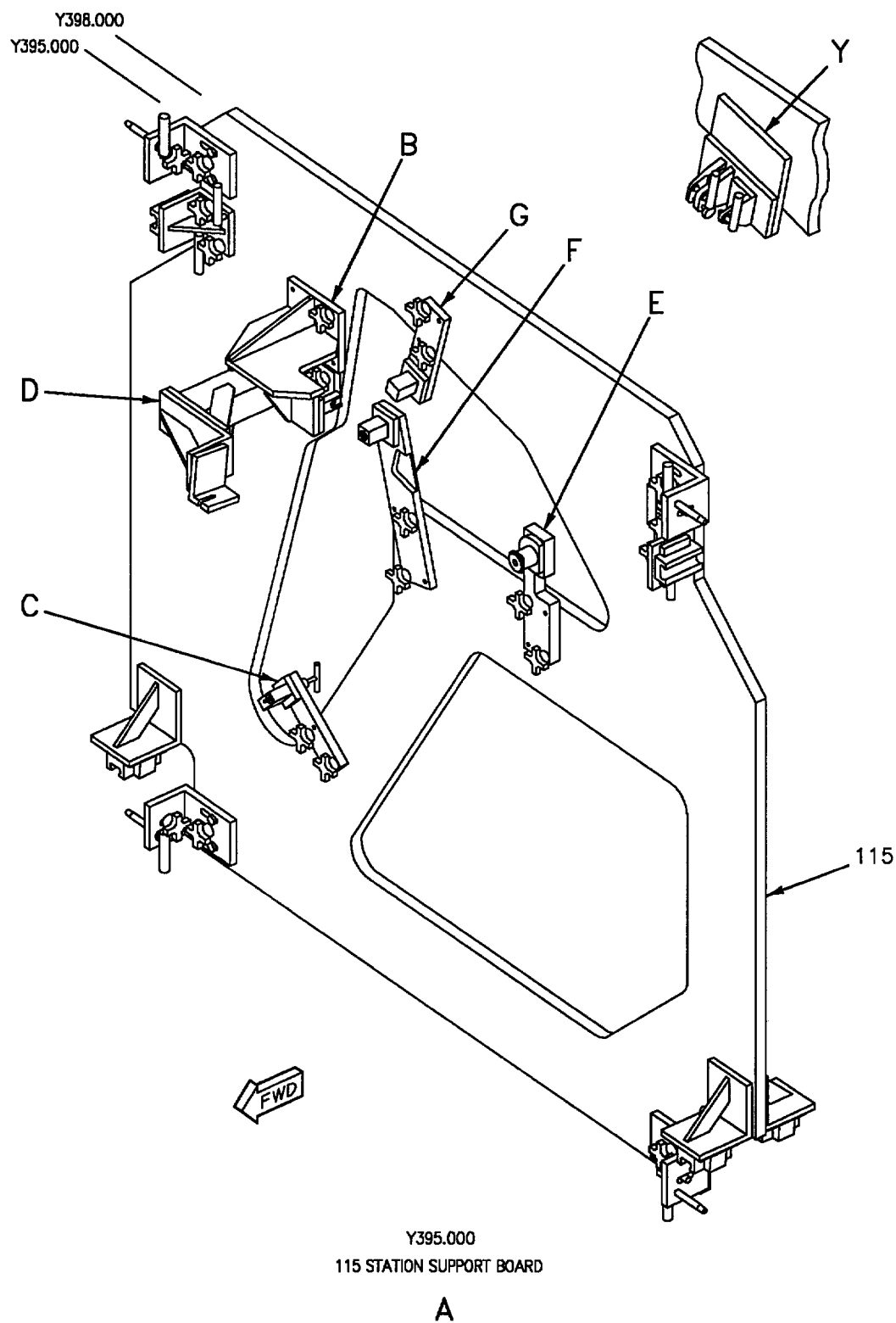


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 2)

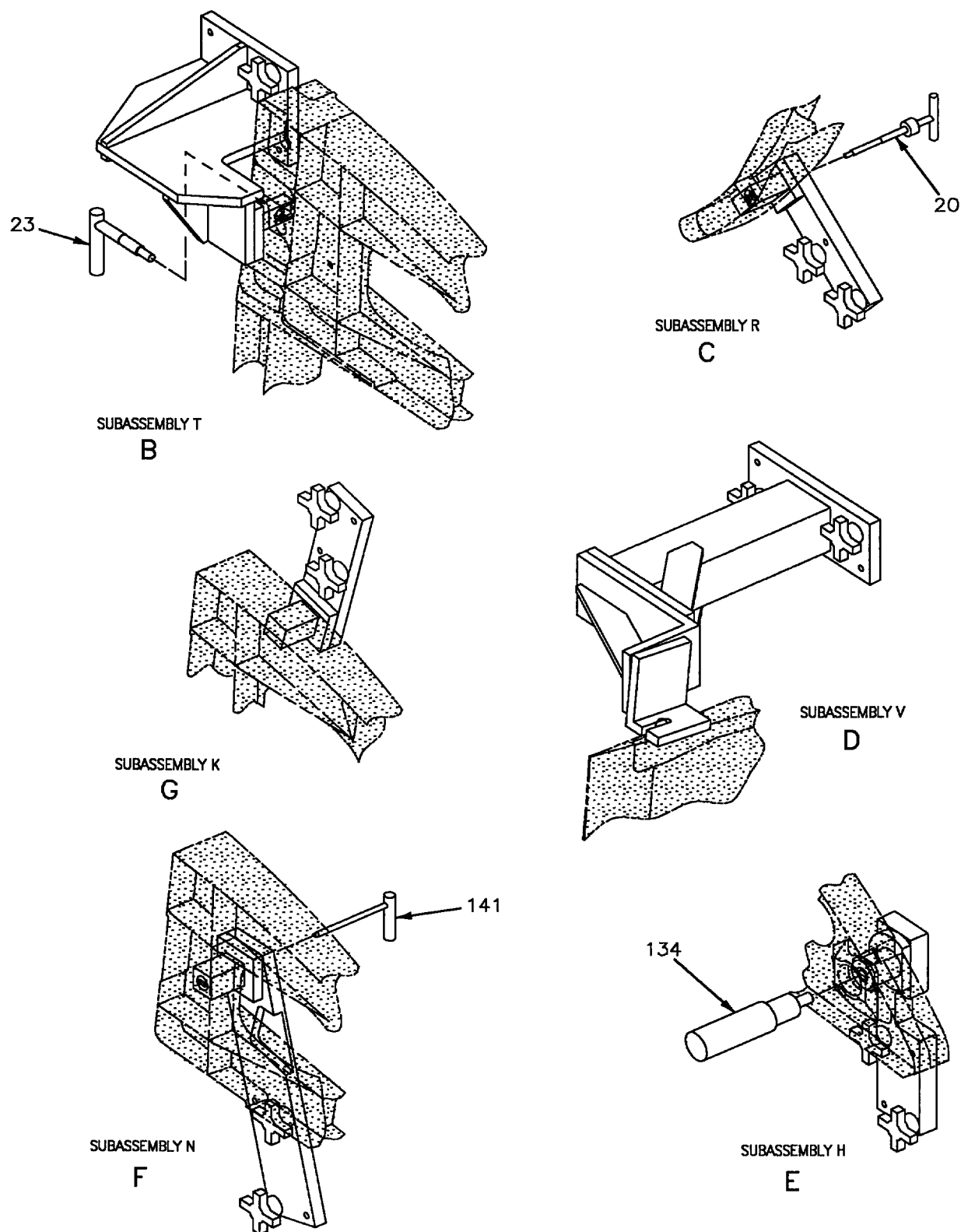


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 3)

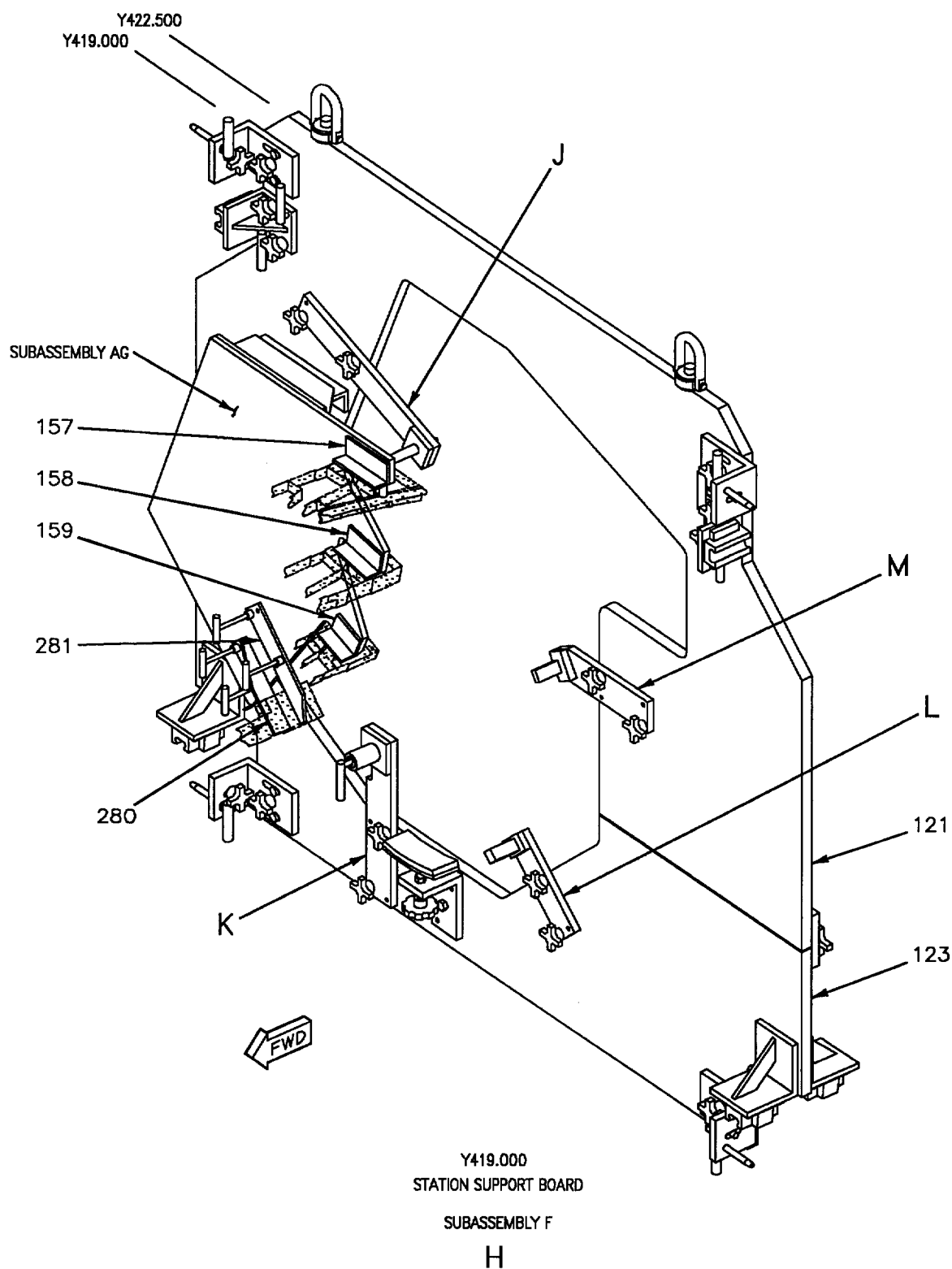


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 4)

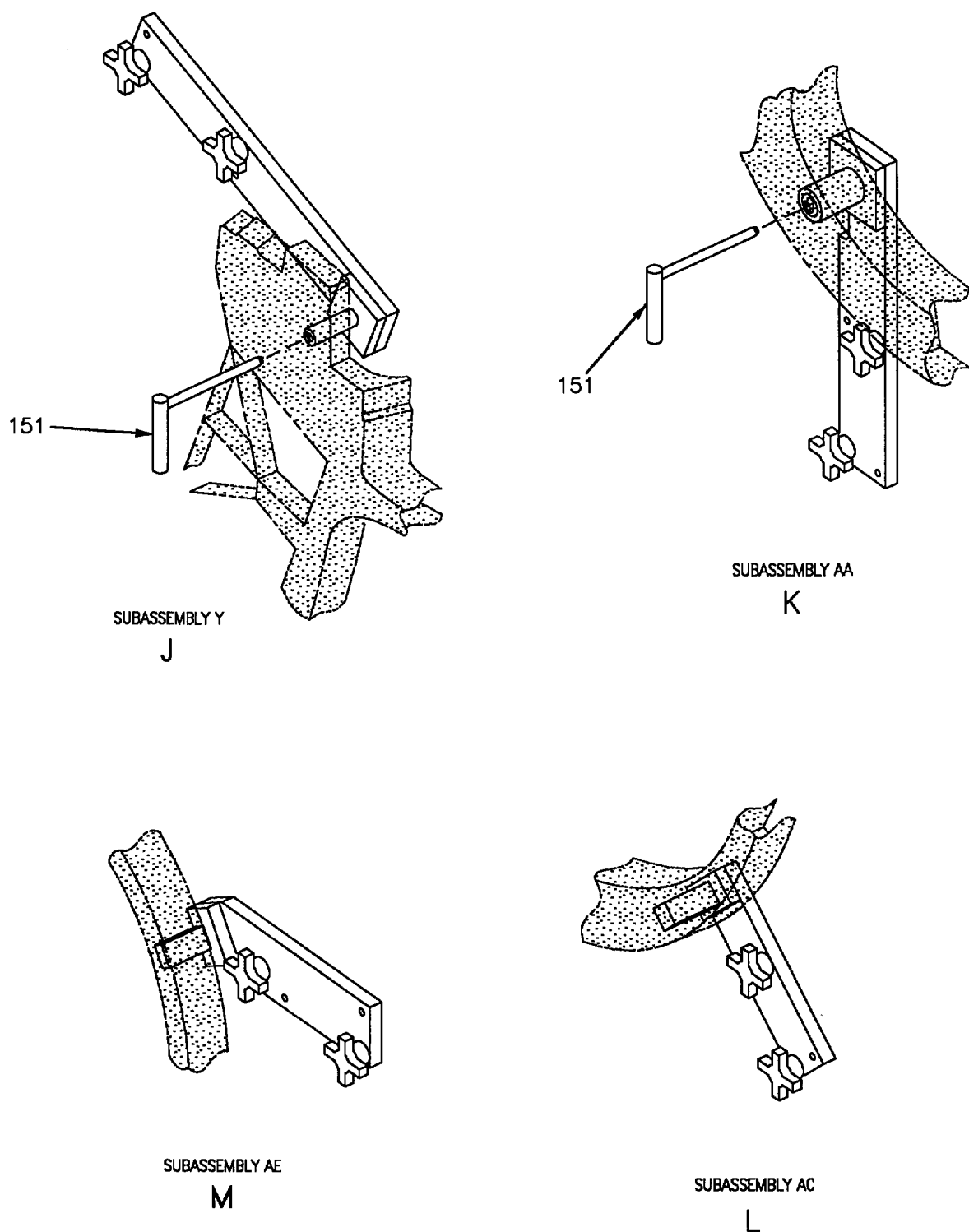
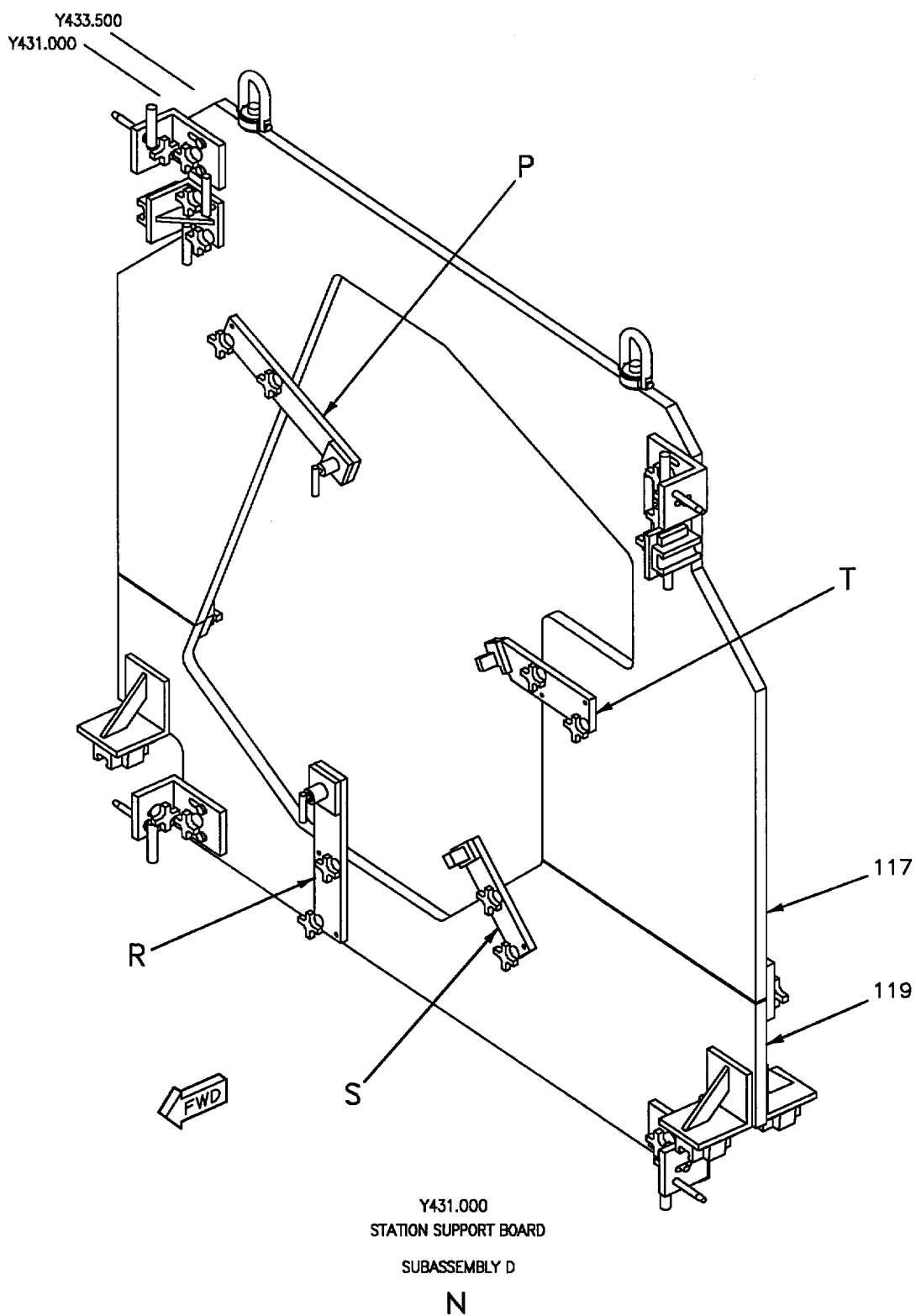


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 5)



03900506

Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 6)

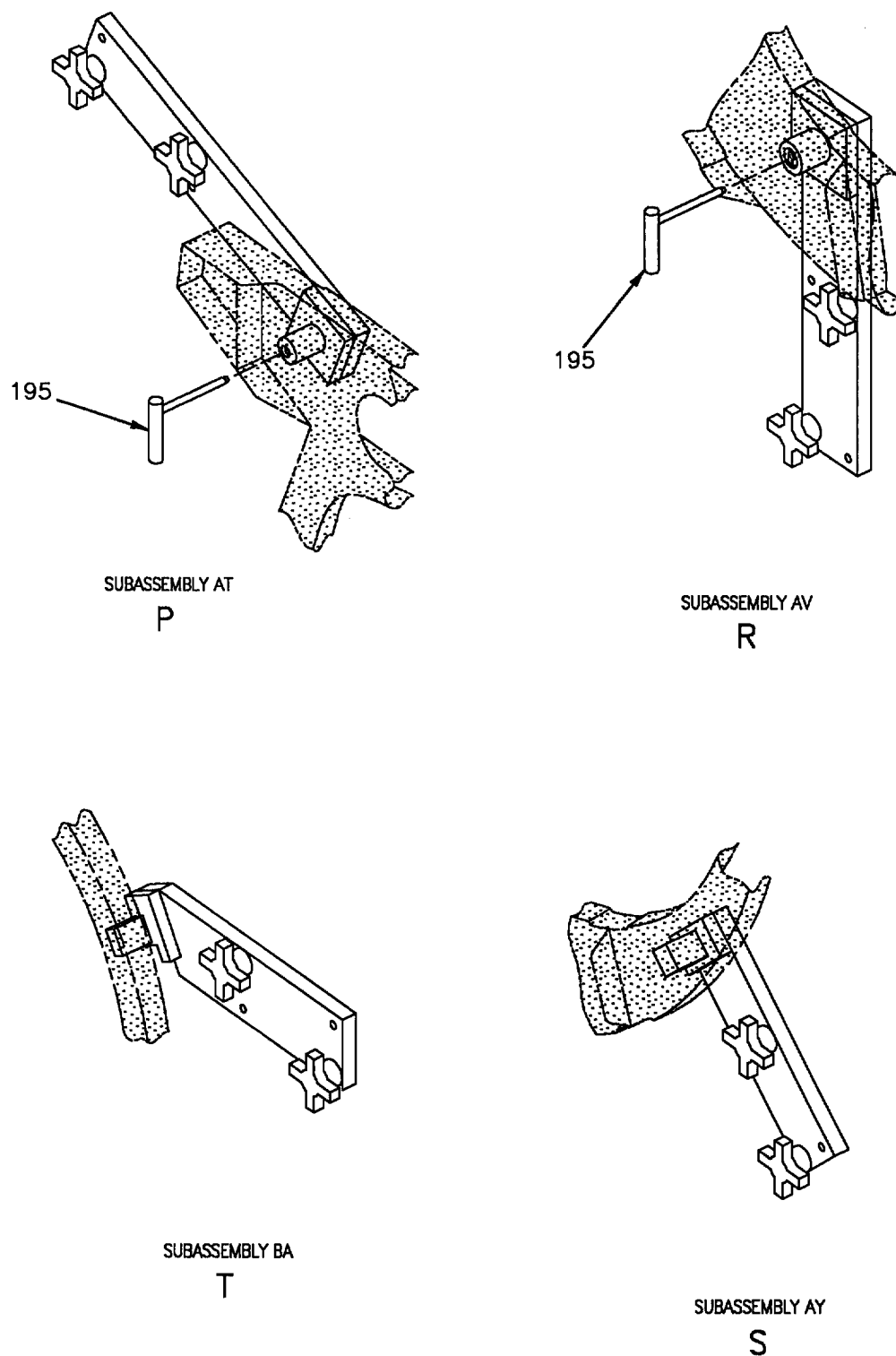


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 7)

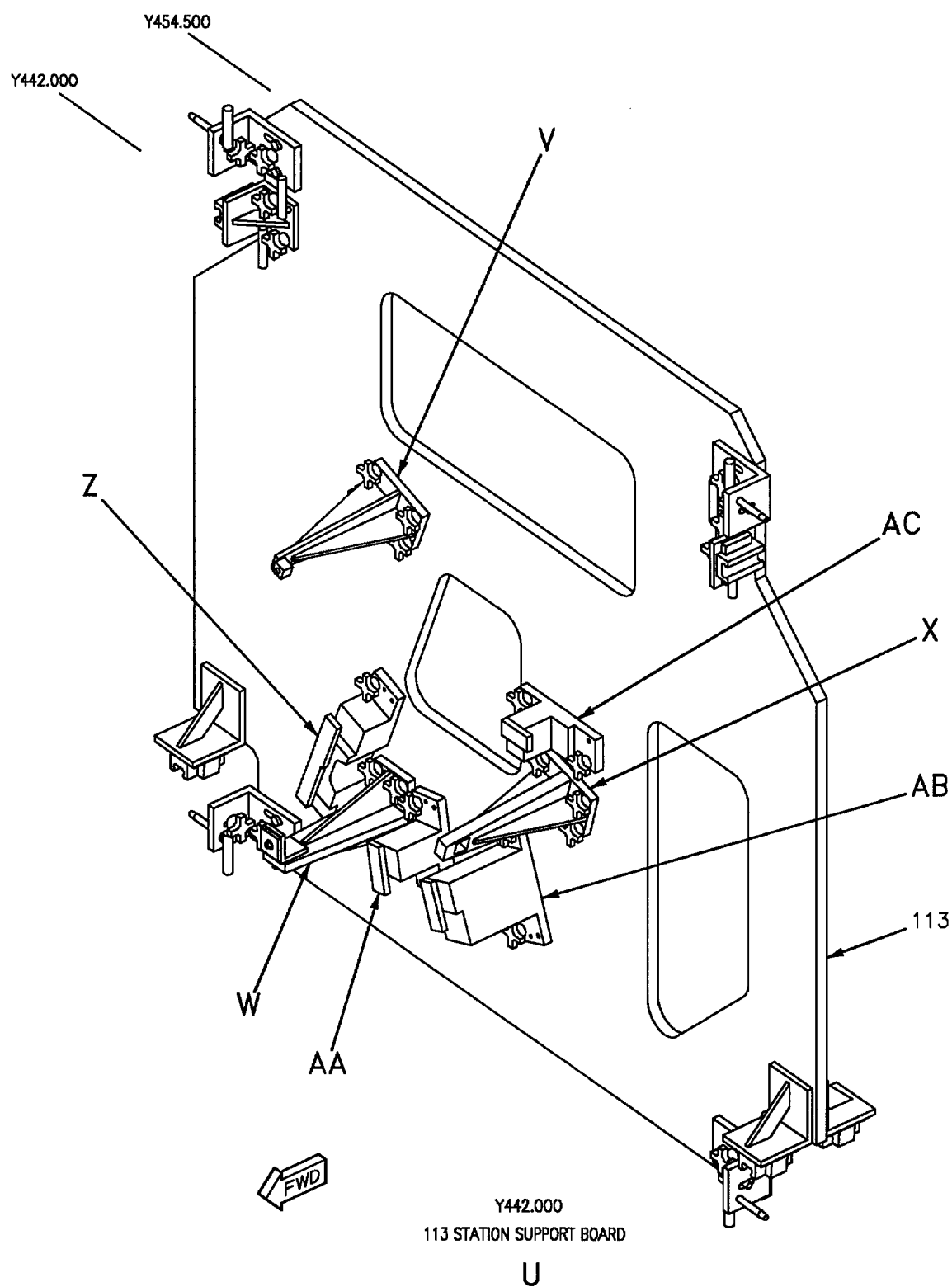
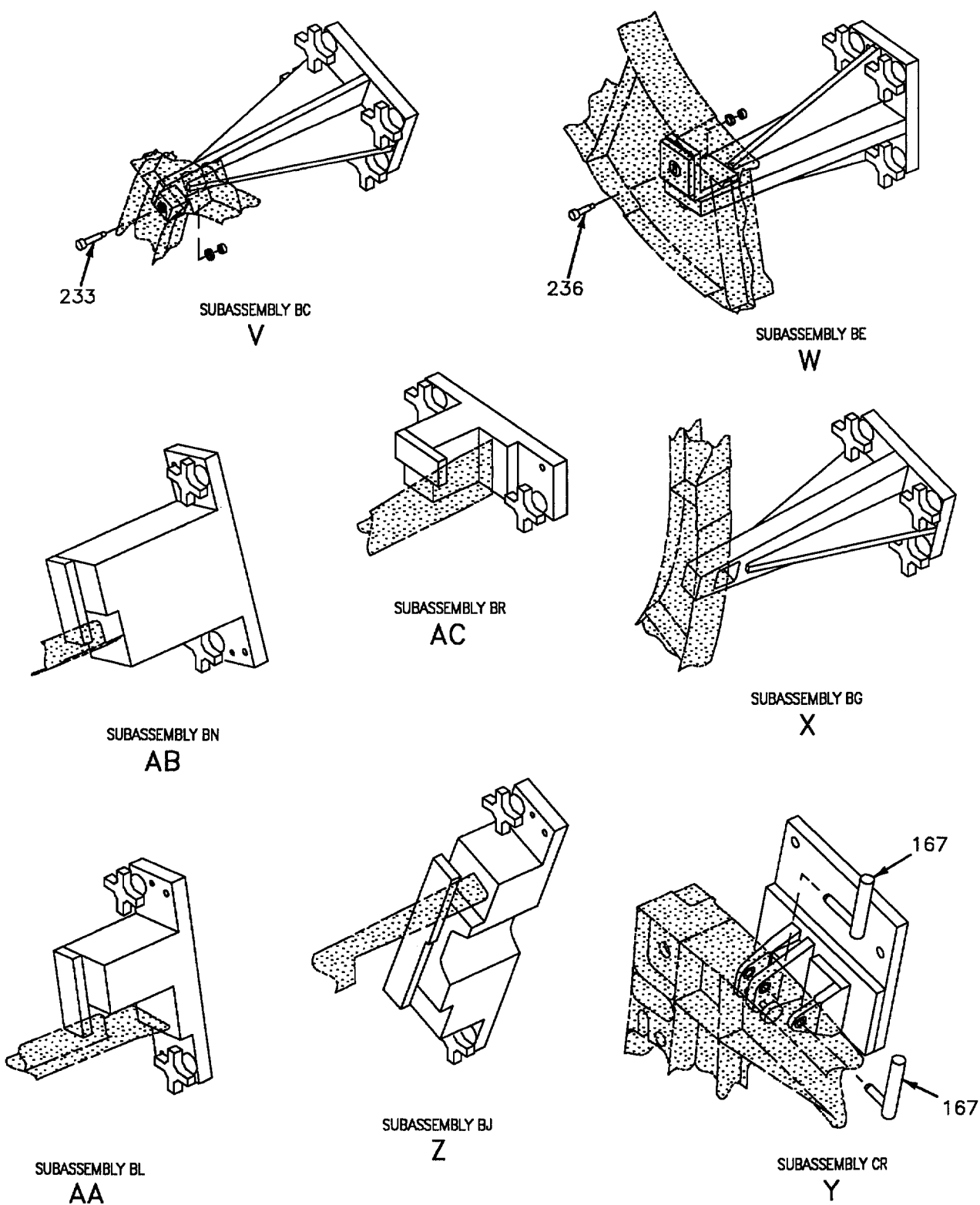


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 8)



03900509

Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure
(Sheet 9)

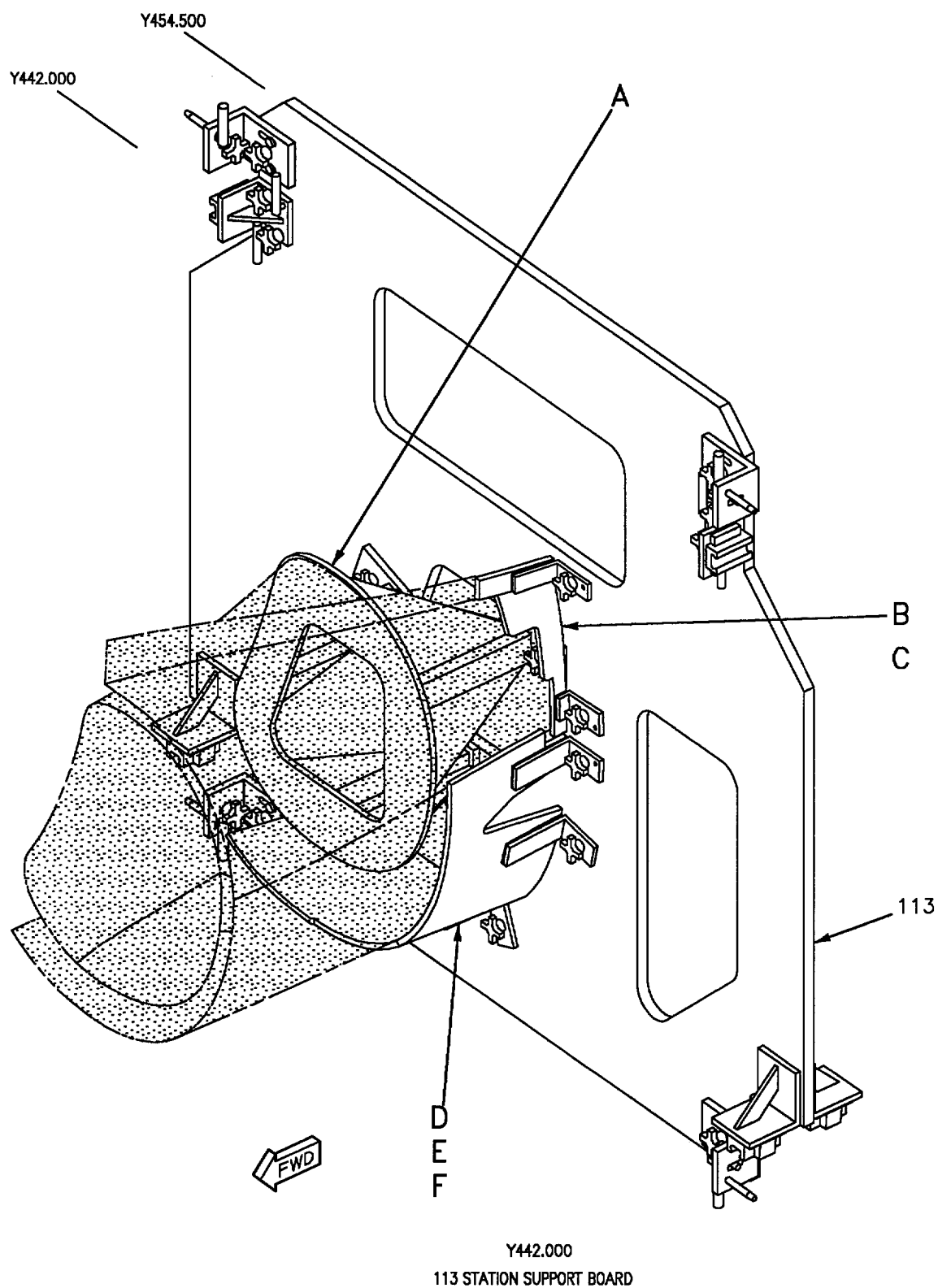
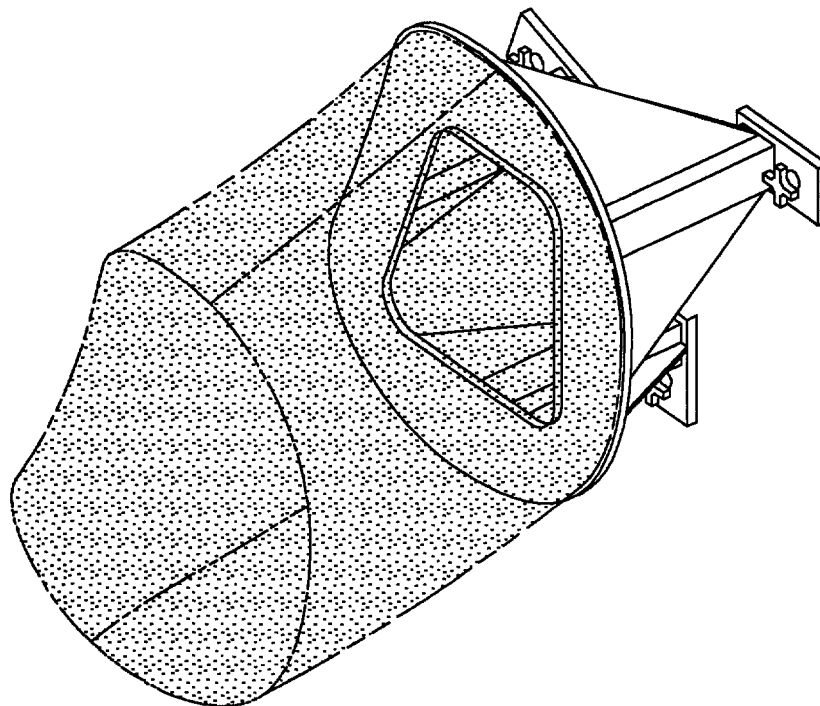
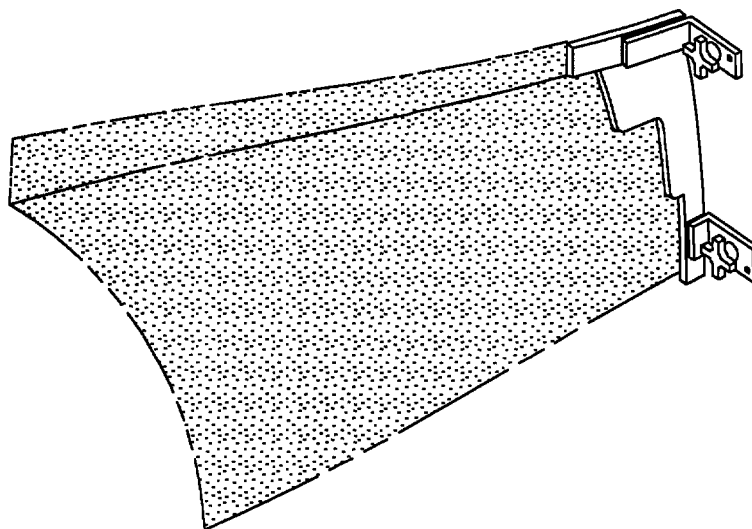


Figure 6. Scribing Aft Theoretical Splice Line (Sheet 1)



SUBASSEMBLY BT

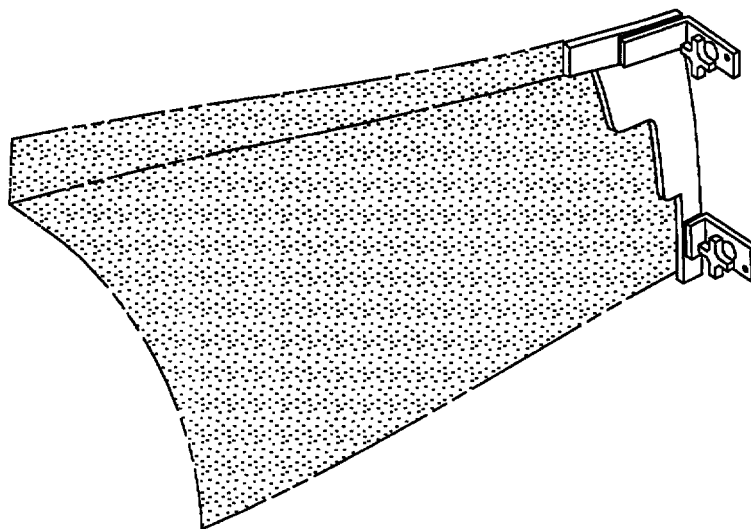
A



SUBASSEMBLY BY

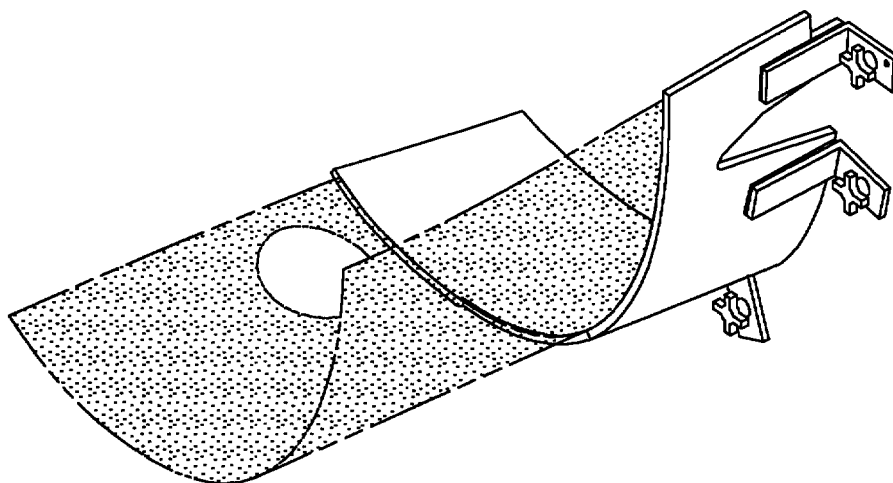
B

Figure 6. Scribing Aft Theoretical Splice Line (Sheet 2)



SUBASSEMBLY CE

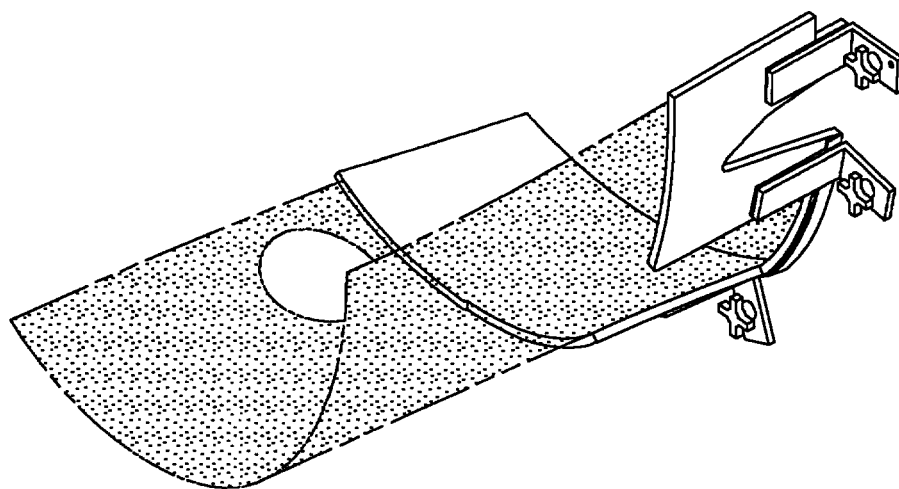
C



SUBASSEMBLY BV

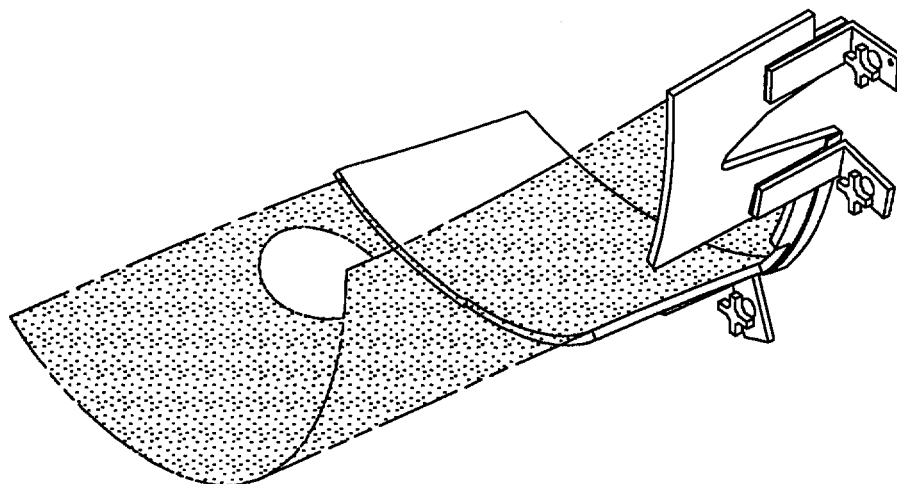
D

Figure 6. Scribing Aft Theoretical Splice Line (Sheet 3)



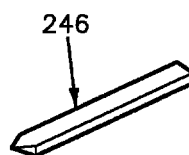
SUBASSEMBLY CA

E



SUBASSEMBLY CC

F



FLAT SCRIBE

G

Figure 6. Scribing Aft Theoretical Splice Line (Sheet 4)

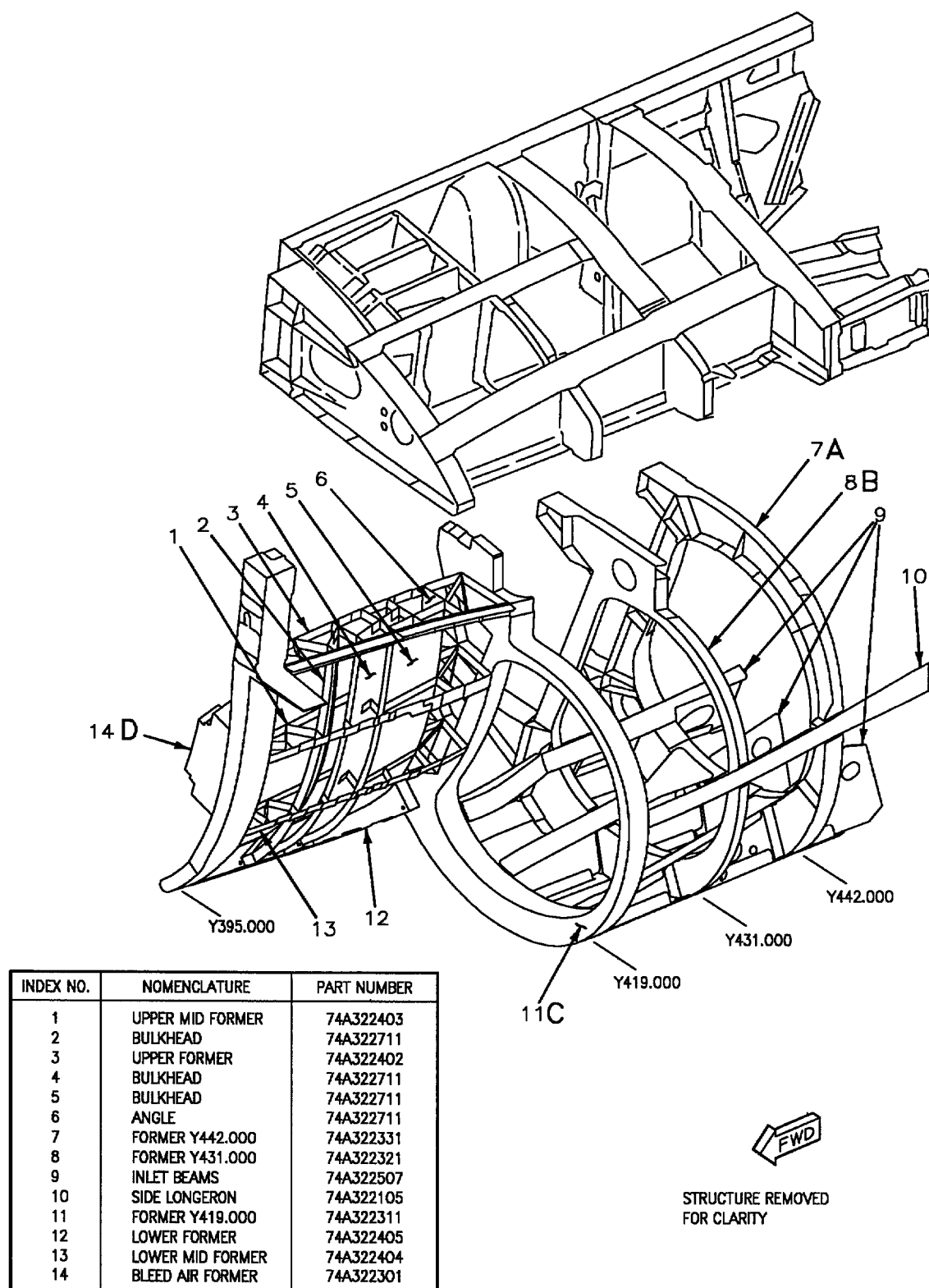


Figure 7. Separation of Inlet Into Four Units for Accessibility While Reworking (Sheet 1)

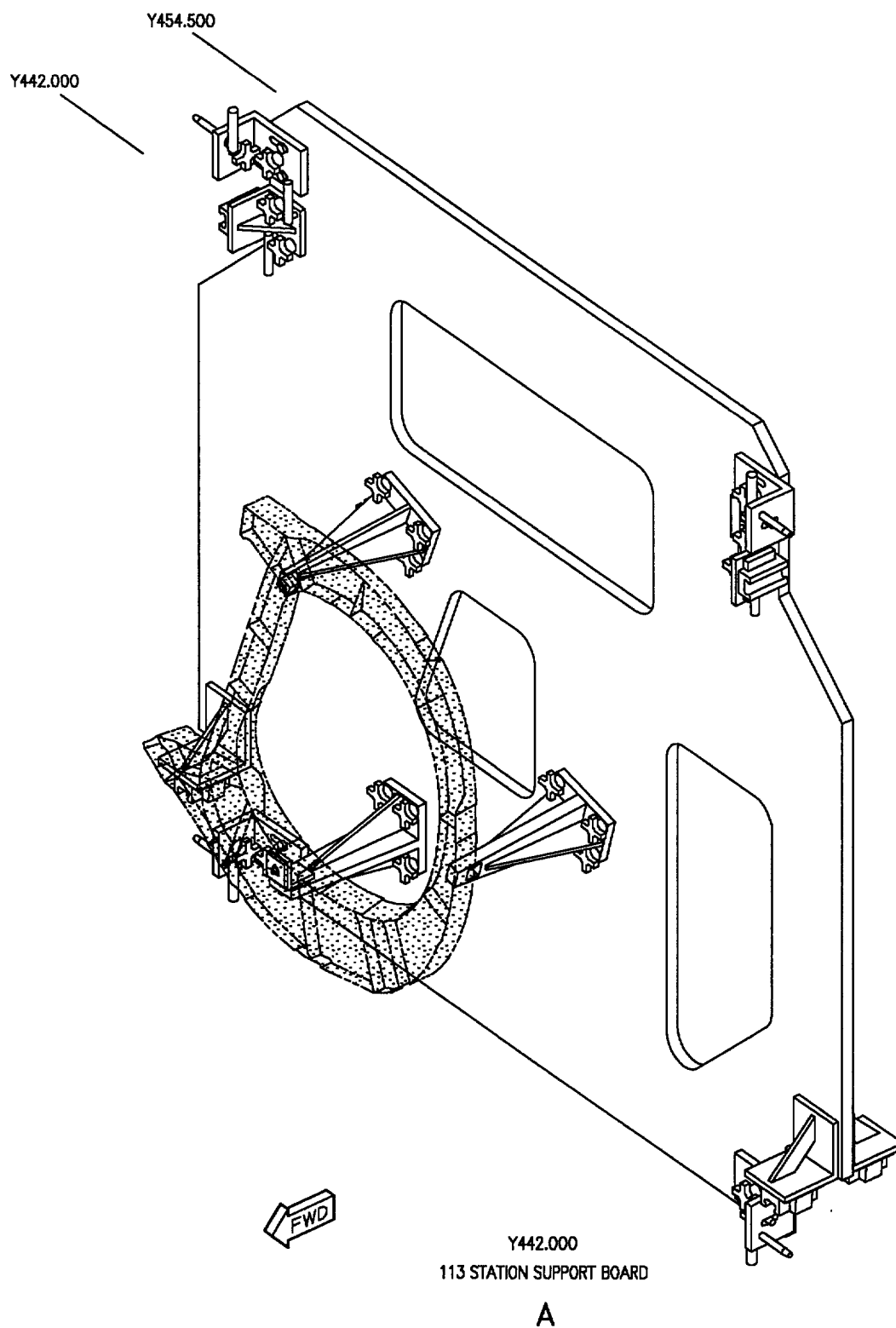


Figure 7. Separation of Inlet Into Four Units for Accessibility While Reworking (Sheet 2)

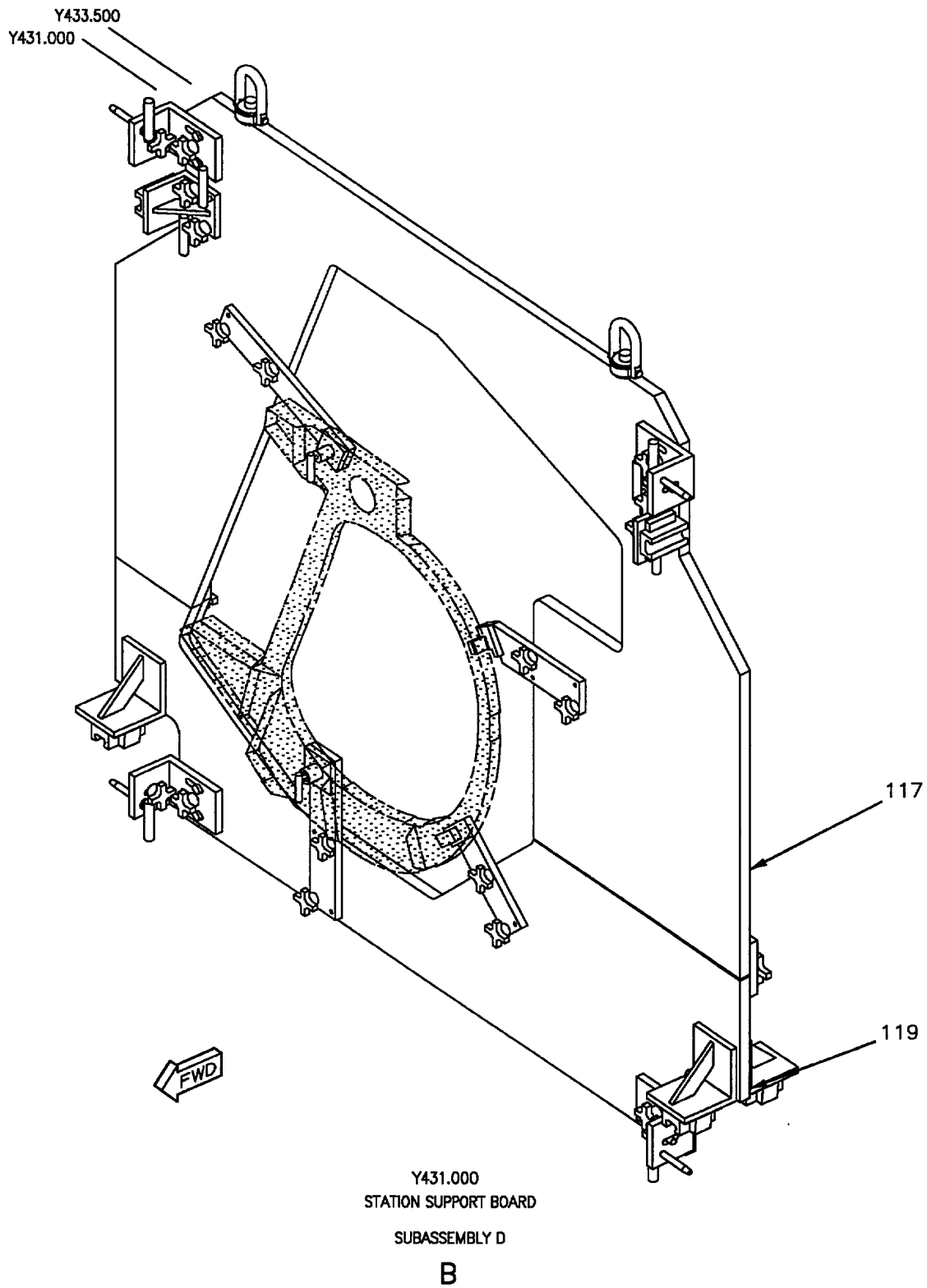


Figure 7. Separation of Inlet Into Four Units for Accessibility While Reworking (Sheet 3)

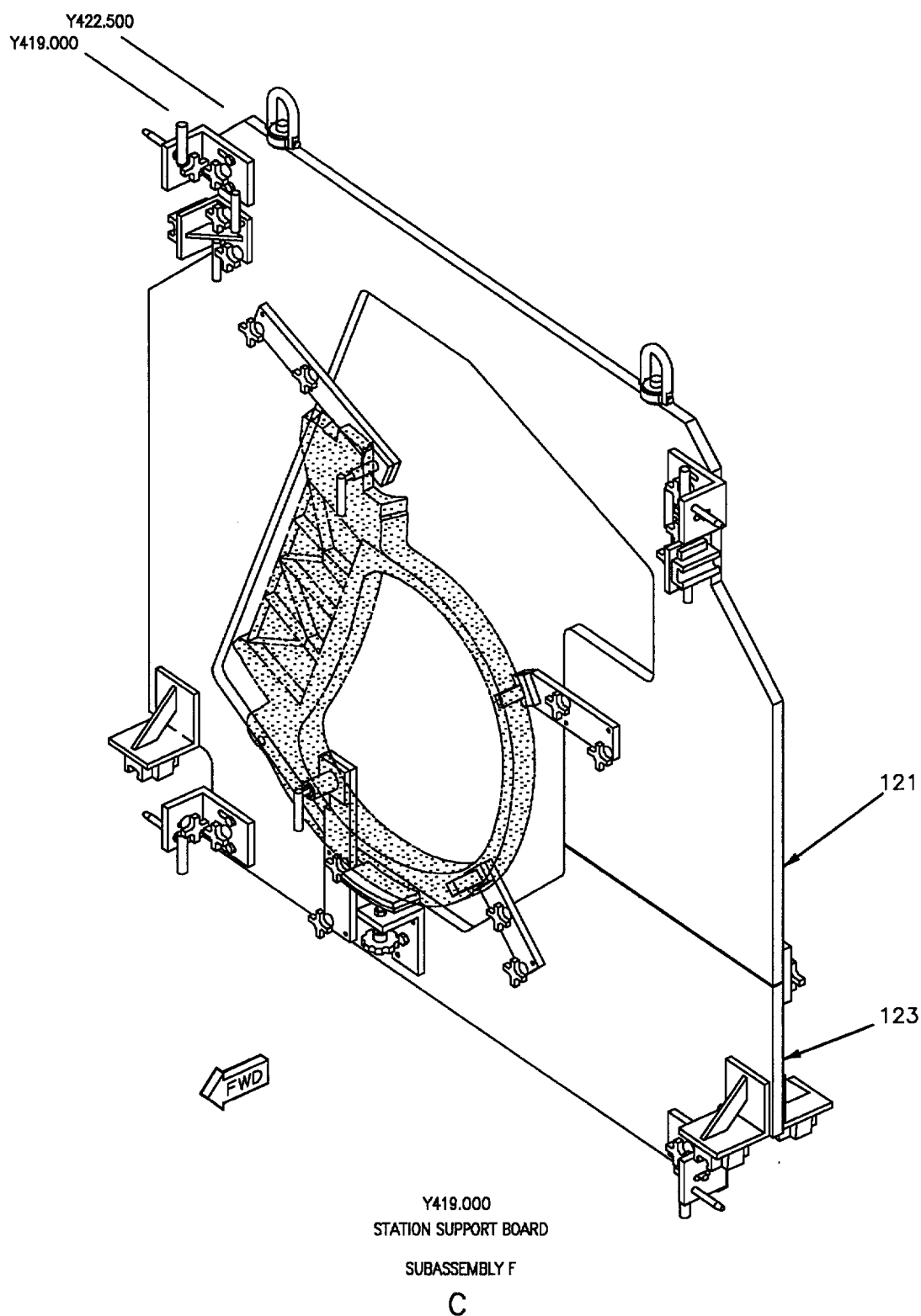


Figure 7. Separation of Inlet Into Four Units for Accessibility While Reworking (Sheet 4)

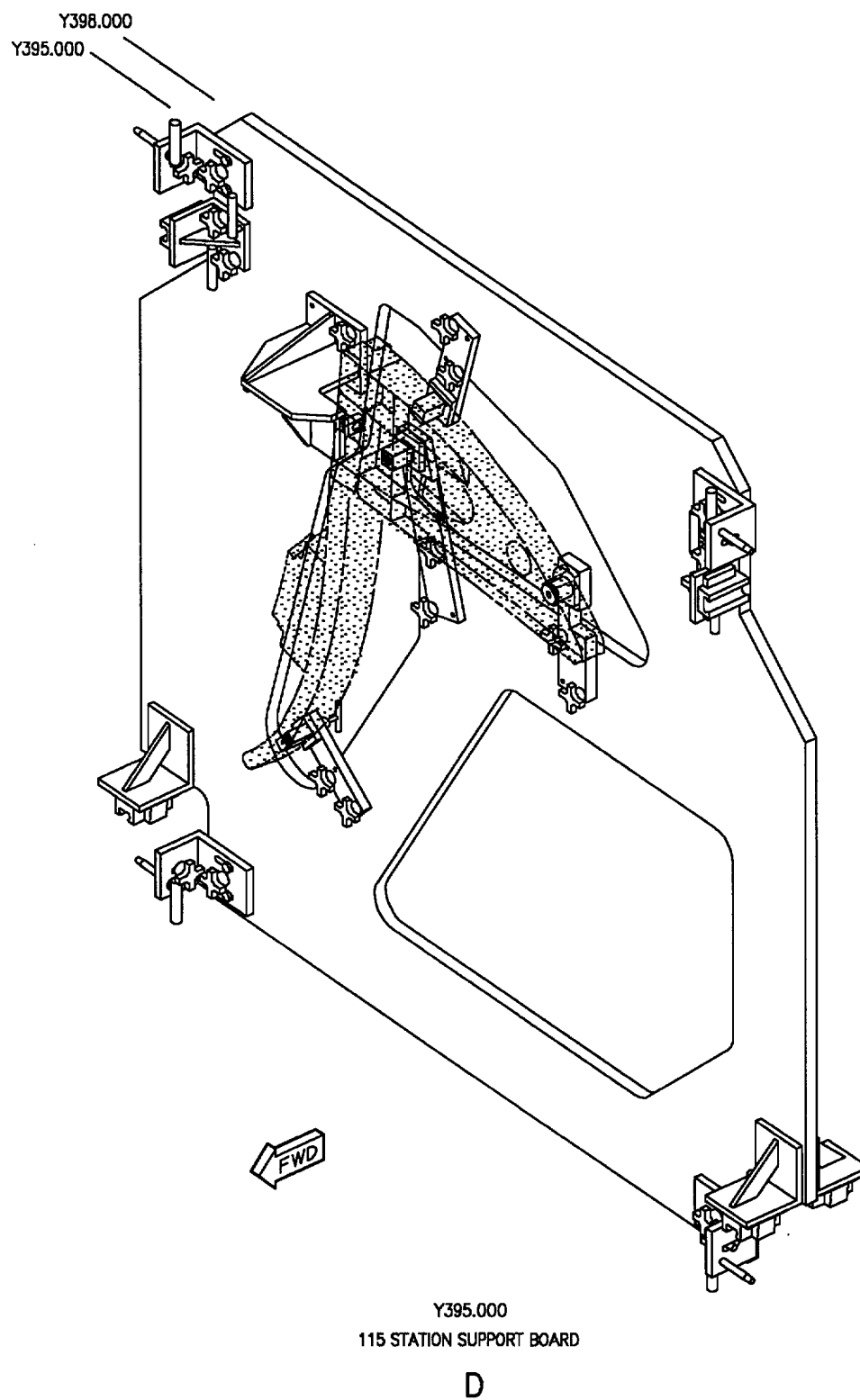
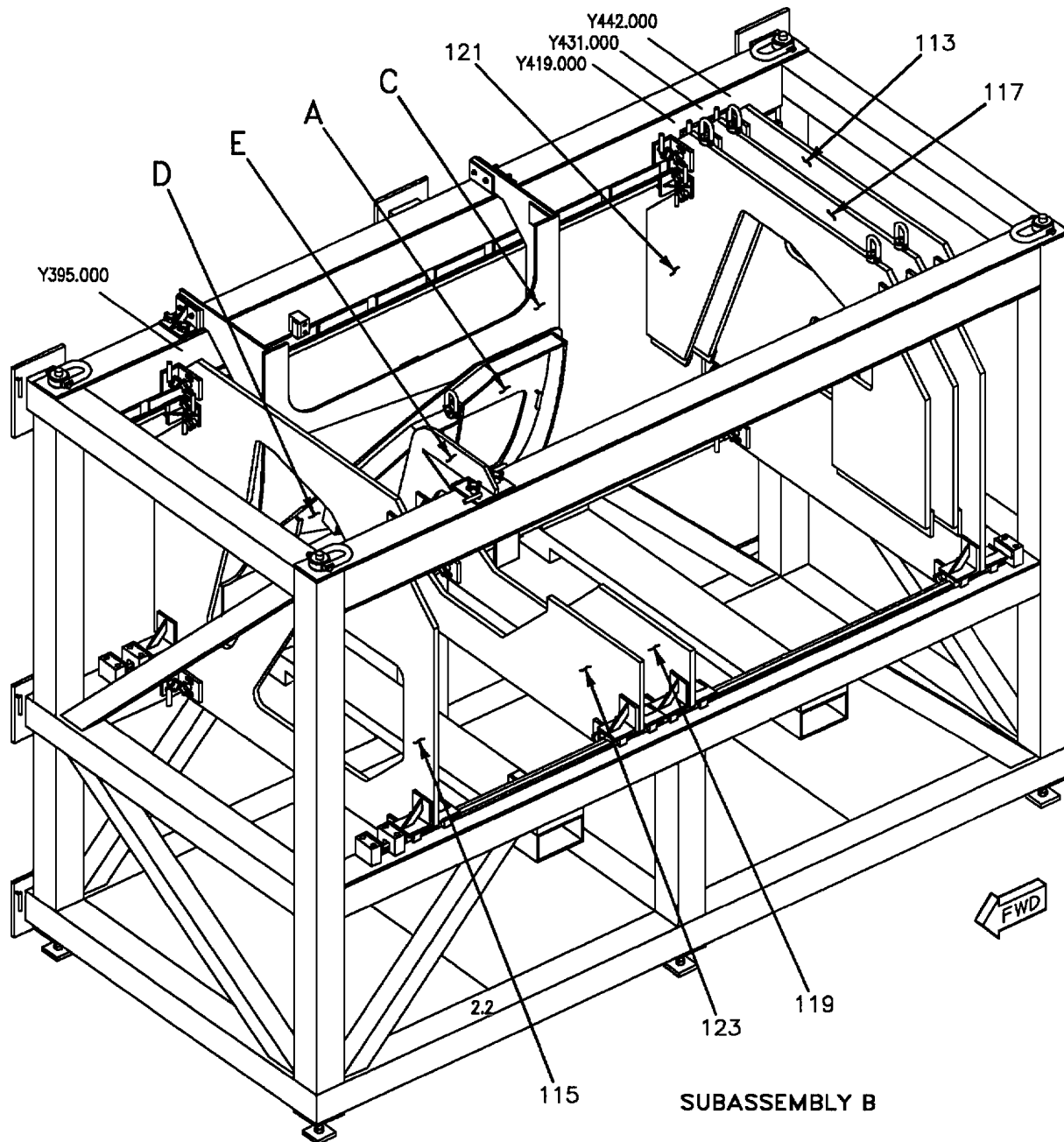


Figure 7. Separation of Inlet Into Four Units for Accessibility While Reworking (Sheet 5)



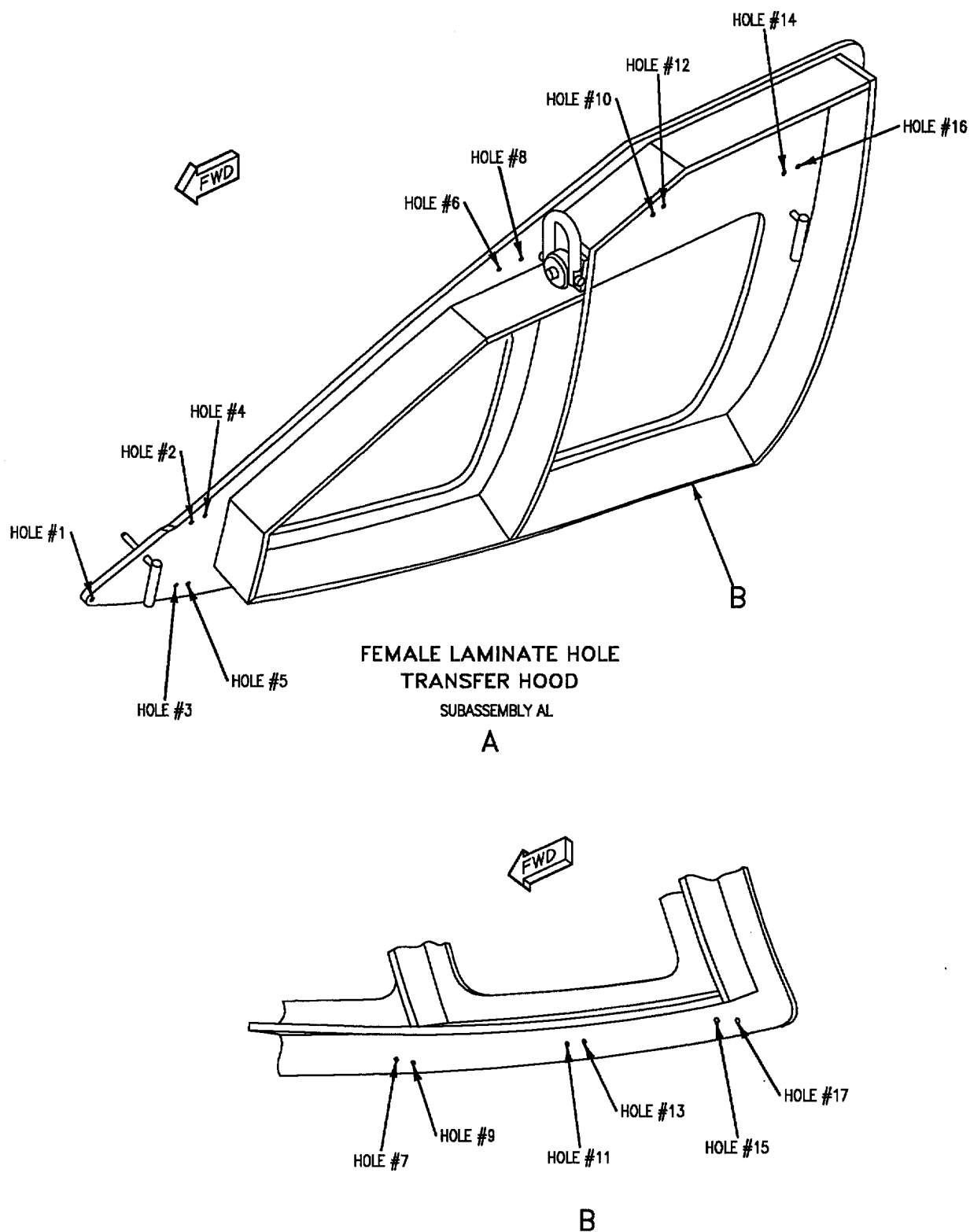
LEGEND

1. Y395.000 MOVED FORWARD
Y442.000 MOVED AFT
Y431.000 TOP MOVED AFT
Y419.000 TOP MOVED AFT

2 HOLE NUMBER 1 ONLY ON 163427 THRU 163473.

03900801

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 1)



03900802

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 2)

TABLE 5. INDEX PIN CHART FOR
HOLES 1 THRU 17

HOLE NUMBER	DET.	HOLE DIA.
2 ➤ 1	200	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	201	0.2495 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	202	0.3125 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
6 THRU 13	201	0.2495 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
14 AND 16	200	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
15 AND 17	203	0.3115 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$

TABLE 6. HOLE INFORMATION

HOLE NUMBER	Y AND Z LOCATIONS		HOLE DIA.		HOLE TOL.	DET.
	Y	Z				
1	387.020	97.043	0.281		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199
2	394.450	99.900	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
3	394.450	94.430	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
4	395.550	99.950	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
5	395.550	93.970	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
6	418.100	109.150	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
7	418.380	80.737	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
8	419.850	109.150	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
9	419.620	85.373	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
10	430.420	107.780	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
11	430.420	83.030	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
12	431.530	107.780	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
13	431.590	82.800	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
14	441.420	105.690	0.281		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
15	441.260	80.790	0.312		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199
16	442.530	105.690	0.281		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
17	442.680	80.580	0.312		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 3)

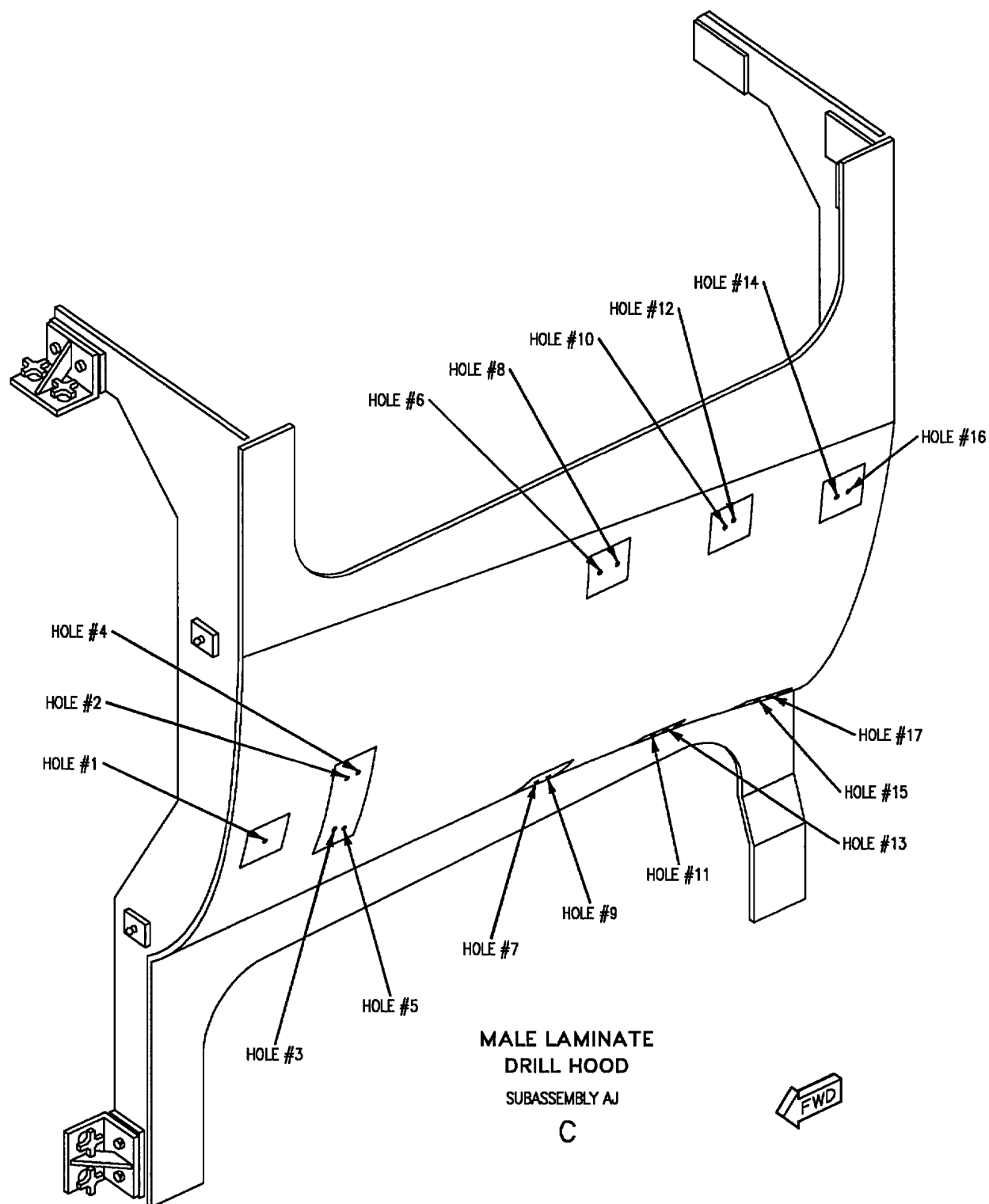


Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 4)

TABLE 7. INDEX PIN CHART FOR
HOLES 1 THRU 17

HOLE NUMBER	DET.	HOLE DIA.
1	193	0.2570 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	194	0.3125 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
6 THRU 13	195	0.2500 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
14 AND 16	196	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
15 AND 17	197	0.3110 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$

TABLE 8. HOLE INFORMATION

HOLE NUMBER	STATION LOCATION	SHIM REQ'D		HOLE DIA.	HOLE TOL.	DET.
		OFFSET	DET.			
1	387.020	0.060	173	0.257	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	182
2	394.450	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
3	394.450	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
4	395.550	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
5	395.550	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
6	418.100	0.150	175	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
7	418.380	0.160	176	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
8	419.850	0.150	175	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
9	419.620	0.160	176	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
10	430.420	0.060	177	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
11	430.420	0.140	178	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
12	431.530	0.060	177	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
13	431.590	0.140	178	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
14	441.420	0.130	179	0.281	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	185
15	441.260	0.140	180	0.312	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	186
16	442.530	0.130	179	0.281	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	185
17	442.680	0.140	180	0.312	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	186

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 5)

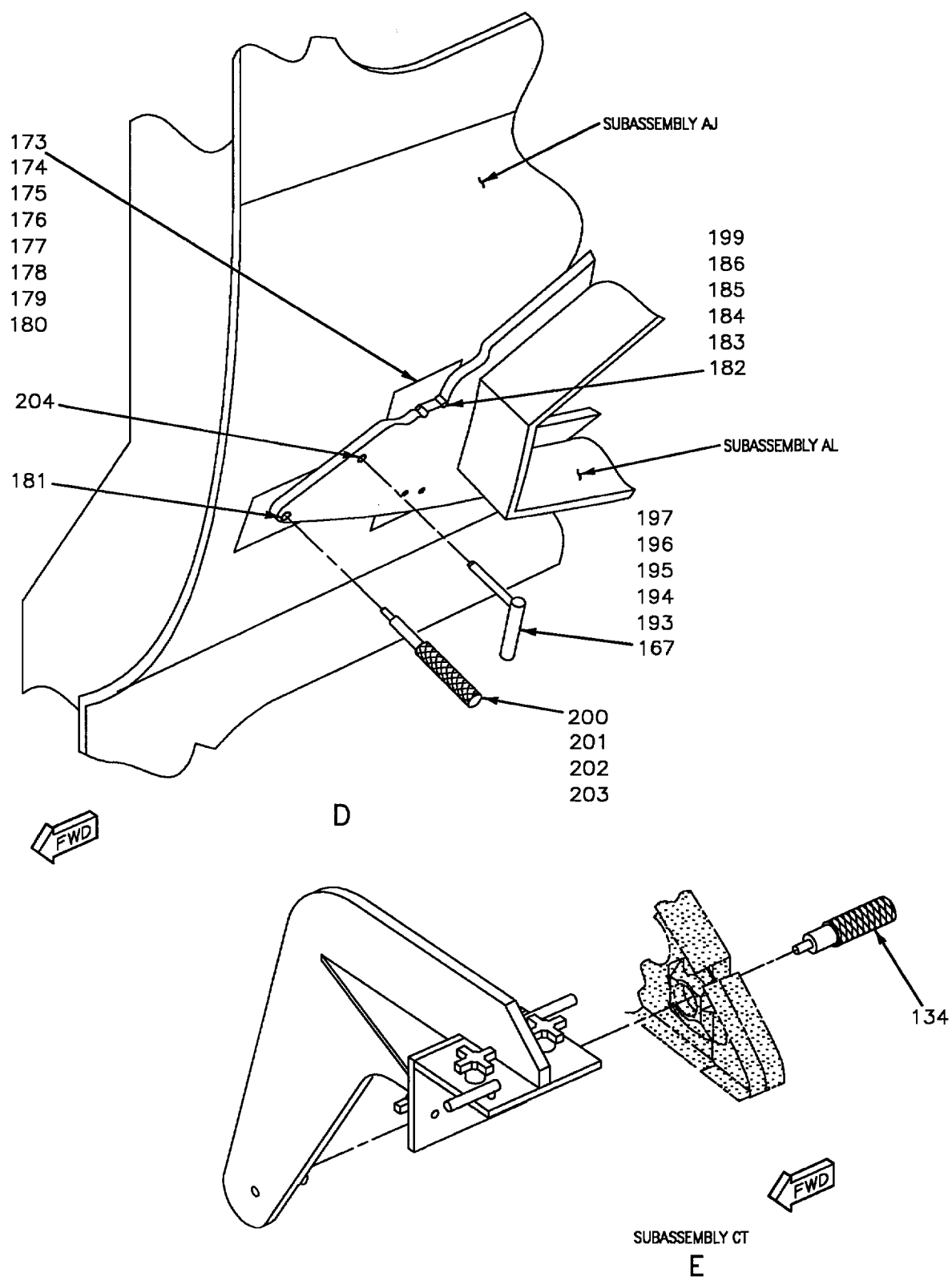


Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 6)

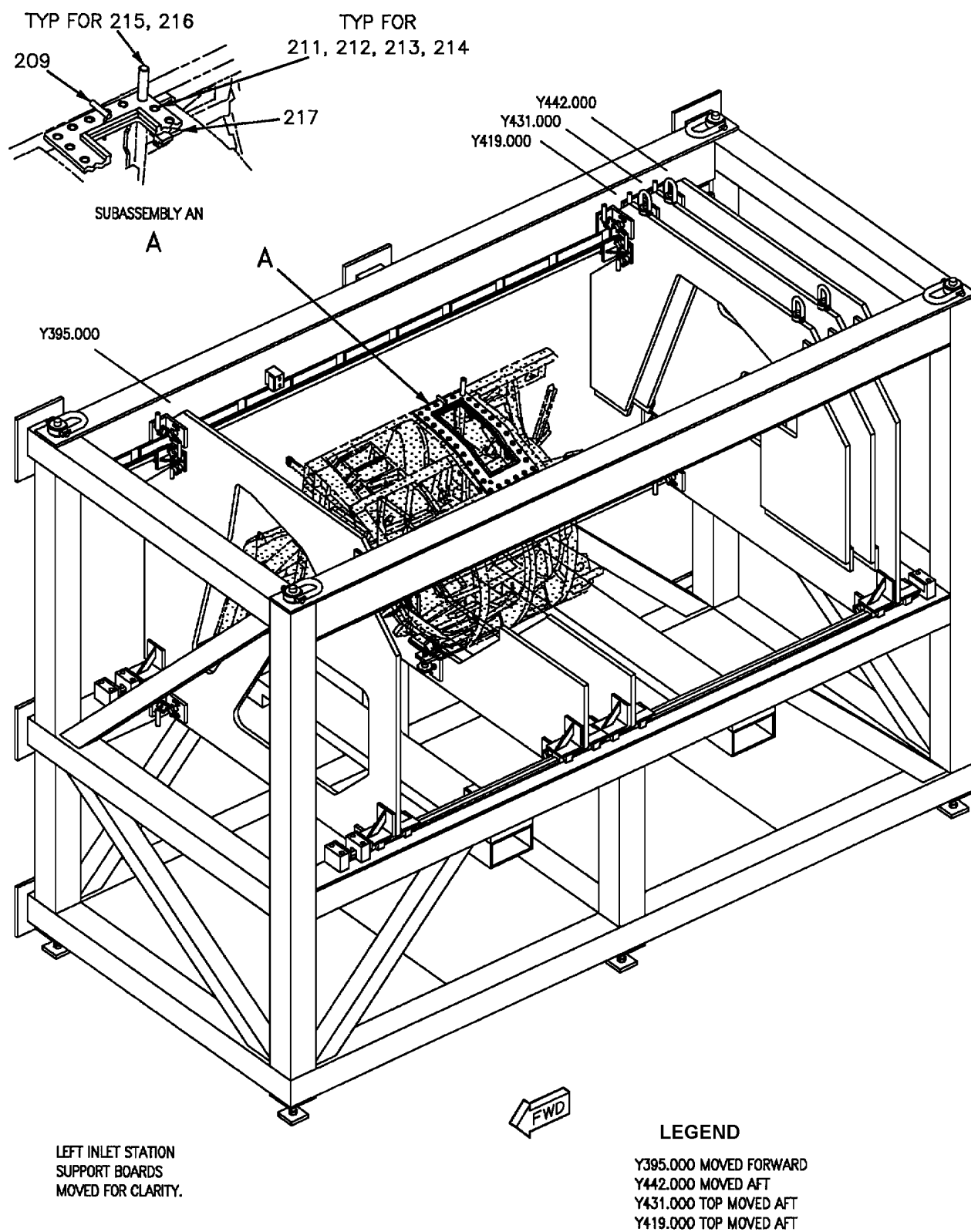


Figure 9. Locating and Drilling Attach Hole Pattern in Upper LEX Substructure for Access Cover 74A322609

039009

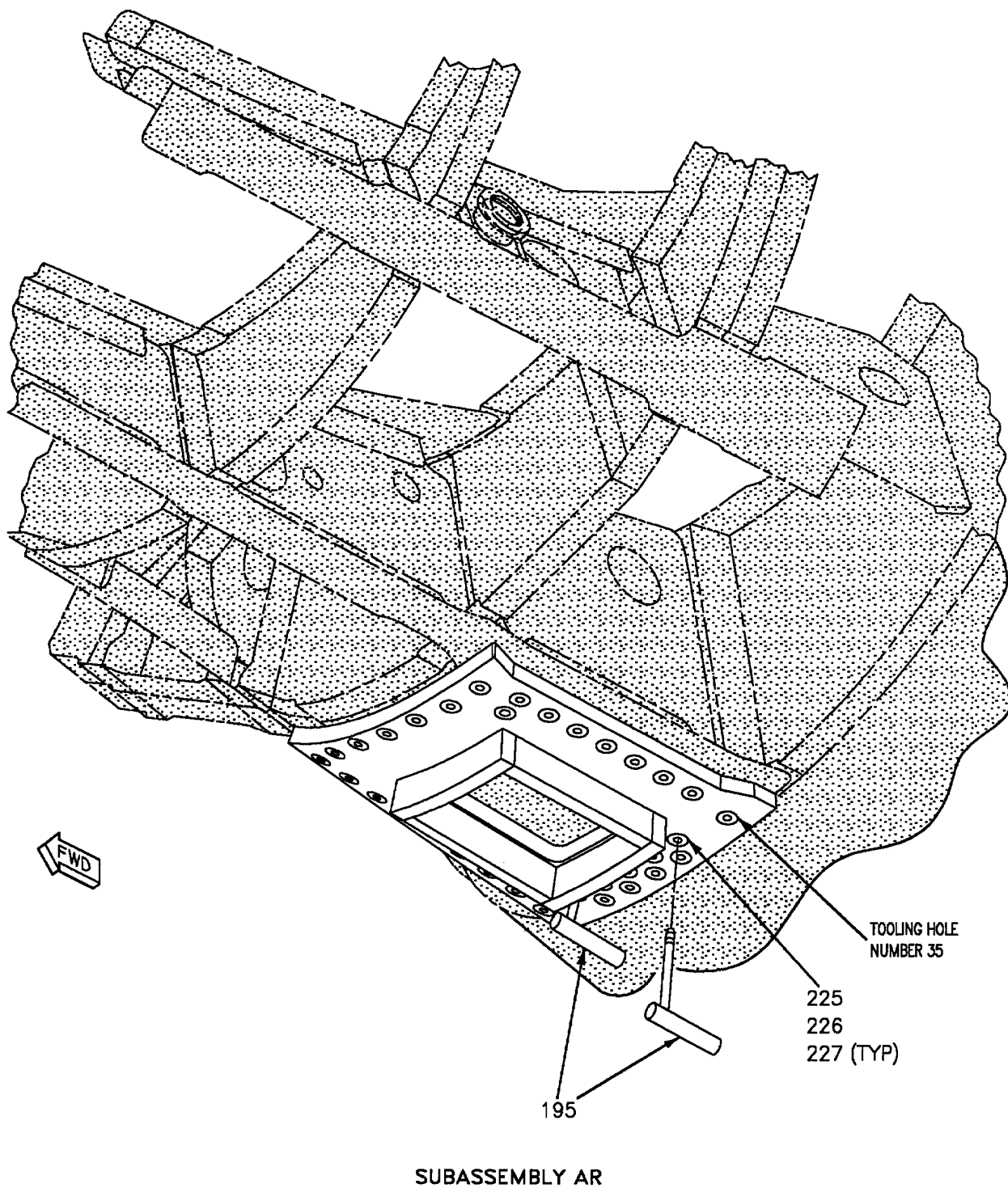


Figure 10. Locating and Drilling Attach Hole Pattern in Lower Inlet Substructure for Access Cover 74A322680, Between Y442.000 and Y453.000, After Inlet is Installed

039010

DEPOT MAINTENANCE

STRUCTURE REPAIR

ENGINE AIR INLET MAINTENANCE FIXTURE, RE174322020-2 (RH)

Reference Material

Structure Repair, Center Fuselage	A1-F18AC-SRM-230
Engine Air Inlet Skins and Fairings	WP009 00
Engine Air Inlet Installation Alignment Fixture, RE474322020-1/-2	WP041 00
Aircraft Corrosion Control	A1-F18AC-SRM-500
Forward Center Fuselage Finish System and markings	WP030 00
Fuel System	A1-F18AC-460-300
Removal-NO. 1 Fuel Tank (5CAP508)	WP010 00
Removal-NO. 1 Fuel Tank (5CAC508)	WP014 00
Removal-NO. 2 Fuel Tank (5CAP509)	WP018 00
Installation-NO. 1 Fuel Tank (5CAP508)	WP011 00
Installation-NO. 1 Fuel Tank (5CAC508)	WP015 00
Installation-NO. 2 Fuel Tank (5CAP509)	WP019 00
Line Maintenance Access Doors	A1-F18AC-LMM-010
Structure Repair, Forward Fuselage	A1-F18AC-SRM-220
Leading Edge Extension Removal and Installation	WP041 01
Structure Repair, General Information	A1-F18AC-SRM-200
Accessory Kits and Spray Mist Coolant Tank	WP004 16

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Identification of Inlet Structure to be Checked, Removed, Repaired, or Replaced	9
Installing Inlet in Maintenance Fixture	8
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Removal of Inlet	6
Reinstalling Inlet on Aircraft	13
Removing Inlet From Maintenance Fixture	13
Repair to Inlet Being Spared	12
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Record of Applicable Technical Directives

None

1. ENGINE AIR INLET MAINTENANCE
FIXTURE, RE174322020-2 (RH). See figure

1.

2. Engine air inlet maintenance fixture, RE174322020-2 (RH) (maintenance fixture) consists of a frame, four station support boards, and many subassemblies. Maintenance fixture is used for checking, removing repairing, and replacing damaged inlet structure.

Support Equipment Required
(Continued)

Nomenclature	Part Number or Type Designation
Engine Air Inlet Installation/Alignment Fixture	RE474322020-1/-2

Support Equipment Required

Nomenclature	Part Number or Type Designation
Engine Air Inlet Beam Type Removal/ Installation Sling (GFE)	RE374322020

Materials Required

Nomenclature	Specification or Part Number
	None

3. PREPARATION OF MAINTENANCE FIXTURE
FOR INLET. See figures 1 and 2. and table 1.

Table 1. Tooling Use

Detail No.	Name	Function
Subassembly C	Subassembly C, maintenance fixture	Hold and index inlet during maintenance.
Subassembly E	Subassembly E/Station support board	Y431.000 Hold many subassemblies and the inlet, use with 118 and 120.
Subassembly G	Subassembly G/Station support board	Y419.000 Hold many subassemblies and the inlet, use with 122 and 124.
Subassembly J	Subassembly J	Locate structure and hold forward end of inlet in position at Y395.000.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
Subassembly L	Subassembly L	Locate former at Y395.000.
Subassembly M	Subassembly M	Locate former at Y395.000.
Subassembly P	Subassembly P	Hold and index structure, use with 141.
Subassembly S	Subassembly S	Locate ramp, use with 20.
Subassembly U	Subassembly U	Hold and index ramp, use with 23.
Subassembly W	Subassembly W	Locate ramp.
Subassembly Z	Subassembly Z	Hold and index structure, use with 151.
Subassembly AB	Subassembly AB	Hold and index structure, use with 151.
Subassembly AD	Subassembly AD	Locate former at Y419.500.
Subassembly AF	Subassembly AF	Locate former at Y419.599.
Subassembly AH	Subassembly AH	Locate upper former truss plane number 1, use with 157.
Subassembly AK	Subassembly AK/ male laminate drill hood	Use to drill holes in new parts so they match fuselage fastener holes.
Subassembly AM	Subassembly AM/ female laminate hole transfer hood	Transfer location of existing fastener holes from fuselage to sub-assembly AK.
Subassembly AP	Subassembly AP/fe- male laminate drill hood	Drill fastener holes in structure for cover 74A322609, use with 216.
Subassembly AS	Subassembly AS	Locate and drill attach holes in lower inlet structure.
Subassembly AU	Subassembly AU	Hold and index structure, use with 195.
Subassembly AW	Subassembly AW	Hold and index structure, use with 195.
Subassembly AZ	Subassembly AZ	Locate structure.
Subassembly BB	Subassembly BB	Locate structure.
Subassembly BD	Subassembly BD	Hold and index inlet in maintenance fixture at Y442.000.
Subassembly BF	Subassembly BF	Hold and index inlet in maintenance fixture.
Subassembly BH	Subassembly BH	Hold and index inlet in maintenance fixture.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
Subassembly BK	Subassembly BK	Locate structure for M.L.G.
Subassembly BM	Subassembly BM	Locate structure for M.L.G.
Subassembly BP	Subassembly BP	Locate outboard longeron reference plane.
Subassembly BS	Subassembly BS	Locate longeron reference plane.
Subassembly BU	Subassembly BU	Scribe aft theoretical scribe line, duct skins.
Subassembly BW	Subassembly BW	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly BZ	Subassembly BZ	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CB	Subassembly CB	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CD	Subassembly CD	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CF	Subassembly CF	Scribe aft theoretical splice line on skins or skin assemblies.
Subassembly CS	Subassembly CS	Locate hinge, use with 167.
Subassembly CU	Subassembly CU	Index inlet at Y395.000.
Subassembly CW	Subassembly CW	Initial holding subassembly at Y419.000.
20	Index pin	Hold and index ramp, use with S.
23	Index pin	Hold and index ramp, use with U.
113	Station support board	Hold many subassemblies and the inlet.
114	Station support board	Hold many subassemblies and the inlet.
116	Station support board	Hold many subassemblies and the inlet.
118	Upper part	With lower part, 120, makes subassembly E.
120	Lower part	With upper part, 118, makes subassembly E.
122	Upper part	With lower part, 124, makes subassembly G.
124	Lower part	With upper part, 122, makes subassembly G.
134	Step pin	Hold subassembly J and structure together, use with CU.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
141	Index pin	Hold and index structure, use with P.
151	Index pin	Hold and index structure, use with Z and AB.
157	Angle	Locate upper truss plane number 1, use with AH.
158	Angle	Locate upper mid former truss plane number 2, use with AH.
159	Angle	Locate lower former truss plane number 4, use with AH.
167	Index pin	Locate hinge, use with CS.
173-180	Shims	Use when picking up/transferring hole patterns, use with AK/AM.
181	UNI-LOCK bushing liner	Accurate hole drilling provision.
182-186	Drill bushings	Maintain accurate base for drilling holes.
193-197	Index pins	Locate holes by indexing.
195	Index pin	Index and locate AS, use with AU.
199	Nurloc liner bushings	Allow accurate drilling of holes.
200-203	Index pins	Locate holes to be drilled.
204	Bushing	Provide accurate hole drilling.
209	Index pin	Index and hold structure.
211-214	Drill bushings.	Provide accurate hole drilling.
215	Index pin	Index attach holes in structure.
216	Index pin	Index attach holes in structure.
217	Index pin	Index and locate structure holes in upper LEX.
225-227	Drill bushings	Provide accurate hole drilling.
233	Shoulder screw.	Hold subassembly BD and inlet together.
236	Shoulder screw	Hold subassembly BF and inlet together.
246	Flat scribe.	Scribe lines, use with BW, BZ, CB, CD, and CF.

Table 1. Tooling Use (Continued)

Detail No.	Name	Function
280 and 281	Angle	Locate lower former truss plane number 4, use with AH.

a. Slide Y395.000 station support board, (detail 116), view A, forward to clear area required to lower inlet into maintenance fixture.

b. Slide Y442.000 station support board, (detail 114), view D, aft to clear area required to lower inlet into maintenance fixture.

c. Remove hardware holding upper part, (detail 122), of station support board, subassembly G, to lower part, (detail 124), of station support board, view B.

d. Remove hardware holding upper part (detail 118), of station support board, subassembly E, to lower part, (detail 120), of station support board, view C.

e. Slide upper part of Y431.000 station support board, (detail 118), of subassembly, E and upper part of Y419.000 station support board, (detail 122), of subassembly G aft to clear area required to lower inlet into maintenance fixture.

f. Maintain position of lower part of Y431.000 station support board, (detail 120), of subassembly E and Y419.000 station support board, (detail 124), of subassembly G for supporting inlet when lowered into maintenance fixture.

g. Maintenance fixture is now correctly prepared to receive inlet.

4. **REMOVAL OF INLET.** See figure 3 and table 2. Damaged inlet must be removed from aircraft to allow major repair or replacement. Primary and secondary structure members are used to attach inlet to aircraft. Primary attach members are inlet formers at Y395.000, Y419.000, Y431.000, and Y442.000. Secondary members include access covers, skin panels, drag beams, and inlet duct.

a. Remove number 1 fuel tank, F/A-18A, (A1-F18AC-460-300, WP010 00), and F/A-18B, (A1-F18AC-460-300, WP014 00).

b. Remove number 2 fuel tank, F/A-18A/B, (A1-F18AC-460-300, WP018 00).

c. Remove leading edge extension LEX (A1-F18AC-SRM-220, WP041 01).

d. Removal sequence for inlet:

(1) Remove all access covers/doors (A1-F18AC-LMM-010).

(2) Remove skins (A1-F18AC-SRM-230, WP009 00).

NOTE

Structure must be removed from fuselage along parting lines.

(3) Remove structure per table 1 and figure 3.

Table 2. Structure Removal

Part Number	Nomenclature	Location	Fastener
74A322105	Side Longeron	74A324202 at Y453.000 Bulkhead	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322109	Lower Cap, Support Beam	74A324105 Longeron, 74A322112 Plate	(6) ST3M415V3 Flush Titanium Hi-Loks.

Table 2. Structure Removal

Part Number	Nomenclature	Location	Fastener
74A322100	Web, Support Beam	74A322112 74A324105 74A324515 Longeron	(11) MS20470D Aluminum Rivets. (17) ST3M416 Titanium Hi-Loks.
74A322505	Lower Cap MLG Beam	74A324202	ST3M781 Flush Titanium Jo-Bolts.
74A322507	Web, MLG Beam	74A324202 74A324806 Stringer	(18) MS20470 Aluminum Rivets.
74A322500	Web	74A324202 74A322516 Bracket	(9) MS20470DD Rivets. (2) ST3M416V Titanium Hi-Loks.
74A322110	Lower Cap Inboard MLG Beam	74A324202	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322101	Diverter Plate	74A320632	(2) ST3M781 Flush Titanium Jo-Bolts.
74A322510	Web Assembly	74A324202	(4) ST3M416V Titanium Hi-Loks.
74A322512	Longeron	74A324202	(2) ST3M415 Titanium Hi-Loks.
74A322400	Web Assembly	74A322510 74A322716 Bulkhead	(17) NAS673V5 Bolts
74A322131	Former Y442.000	74A324802 and 74A324804 Duct Skins	(81) ST3M748 Flush Aluminum Rivets. (4) ST3M675 Flush Titanium Rivets. (6) NAS2706 Titanium Lock Bolts.

NOTE

Rebuilt inlet configurations will be dependent upon aircraft configuration. This is due to large number of mating components with non mating fastener patterns. Example: reinstallation of repaired inlet on same aircraft, attach fastener pattern will re-align, and undamaged mating components need not be replaced. When repaired inlet will be cycled into spares for installation on another aircraft, all inlet/fuselage mating parts, exclusive of interchangeable access panels, must be replaced with blank components.

(4) Disconnect pneumatic, hydraulic, and electrical system lines, which transmit interfuselage interface, per table 2 and table 1.

Table 3. Component Removal

Nomenclature	Part Number	Remarks
Wire harness	WT M015	Detach
LCS Tubing	74A710620	Detach at Y395.000
Radar Coolant Tubing	74A835763	Detach at Y395.000
Secondary Ejector Duct	30A363	Detach
Outboard LE Flap Hydraulic Tubing	74A695816	Detach
ECS Duct Assembly	74A835629	Detach From Y419.000 Former
LE flap DriveUnit	74A670270	Remove

(5) Cap/close any open system tubing/lines to prevent contamination.

NOTE









At this point, fasteners and structure members have been removed. Inlet remains attached to fuselage at four inlet former stations. Inlet must be supported using engine air inlet beam type, installation/removal sling (sling).

(6) Install sling on inlet, sling is GFE.

(7) Support inlet with sling.

(8) Disconnect 74A322360 and 74A322361 supports by removing attaching hardware at either fuselage or inlet end of supports, see table 4.

Table 4. Final Attachment Hardware

Part Number	Nomenclature	Location
NAS6710U25	Bolt	74A322360 
MS21084L10	Nut	74A322360 
NAS6710U26	Bolt	74A322361 
MS21084L10	Nut	74A322361 
NAS6610-24	Bolt	
MS21045L10	Nut	
NOTES  Fuselage attach.  Inlet attach.		

(9) Disconnect and remove 74A322351-2017 support which is located at Y383.000 and installed between lower ramp and fuselage. Attaching hardware is NAS674V94D bolt, two AN960PD416 washers, and AN310-C4 nut.

(10) Remove 17 remaining close tolerance titanium bolts; 15 are NAS674 and two are NAS675. This will free inlet from fuselage. Forward bolt, through ECS lip duct, installs into ST3M726C4M platenut, while remaining bolts are secured with NAS1291 self-locking CRES nuts. At this point inlet is free from fuselage.

NOTE

Engine air inlet installation alignment fixture (alignment fixture) must be used to stabilize inlet.

(11) Use alignment fixture to break sealant holding inlet to fuselage (A1-F18AC-SRM-230, WP041 00).

(12) Carefully move inlet forward to clear stovepipe, air inlet aft inner ducting.

5. INSTALLING INLET IN MAINTENANCE FIXTURE. See figure 4 and table 1.

a. Lower damaged inlet into maintenance fixture from top of maintenance fixture.

b. Secure inlet in maintenance fixture using subassembly CW, view A, at Y419.000 station support board, (detail 124).

c. Remove sling.

d. Move upper part of Y419.000 station support board, subassembly G, (detail 122), Figure 1, view B, forward into position over lower part.

e. Move upper part of Y431.000 station support board, subassembly E, (detail 118), view C, forward into position over lower part.

f. Secure upper and lower parts of Y419.000 and Y431.000 station support boards in correct position using supplied hardware.

g. Slide Y395.000 station support board (detail 116), view A, aft and index and fasten at original station location.

h. Slide Y442.000 station support board, (detail 114), view D, forward and index and fasten at original station location. Maintenance fixture is now ready to position and check inlet for damaged structure.

NOTE

Position of inlet in maintenance fixture depends upon condition of 74A322331 former at Y442.000 and 74A322341 former at Y395.000 not being damaged.

i. Position inlet in maintenance fixture at aft station Y442.000 using subassemblies BD, BF, BH, figure 4, views C, D, and E attached to Y442.000 station support board, (detail 114), view B.

j. Position forward end of inlet at station Y395.000, using subassembly J, view G, attached to (detail 116), view F, station support board, with step pin, (detail 134).

6. IDENTIFICATION OF INLET STRUCTURE TO BE CHECKED, REMOVED, REPAIRED, OR REPLACED.

a. Ramp assembly, 74A322720; which includes-pin, 74A322409, at Y383.000 and former, 74A322301, at Y395.000.

b. Former assembly, 74A322341; which includes former, 74A322300, at Y395.000 for LEX.

c. Support, 74A322302; with-spherical bearing ST4M212-19, for former, 74A322341, at Y395.000 for LEX.

d. Former 74A322311, at Y419.000.

e. Upper former, 74A322402, for truss plane number 1 between Y395.000 and Y419.000.

f. Upper mid. former, 74A322403, for truss plane number 2 between Y395.000 and Y419.000.

g. Lower mid. former, 74A322403, for truss plane number 3 between Y395.000 and Y419.000.

h. Lower former, 74A322405, for truss plane number 4 between Y395.000 and Y419.000.

i. Former, 74A322321, at Y431.000.

j. Former, 74A322331, at Y442.000.

k. Support, 74A322363, at Y395.000 for hinge of door, 74A322659, of LEX.

l. Inboard MLG drag beam; consisting of inner cap, 74A322107, and outer cap, 74A322500, webs.

m. Outboard MLG drag beam consisting of outer cap, 74A322506, and inner cap, 74A322507, webs.

n. Lower outboard longeron consisting of inner cap, 74A322108, outer cap, 74A322109 and 74A322100, webs.

o. Slide longeron, 74A322105, at Z91.500.

7. CHECKING, REMOVING, REPLACING, OR REPAIRING OF DAMAGED INLET STRUCTURE. See figure 5 and table 1.

a. Ramp assembly, 74A322341; which includes-Pin, 74A322409, at Y383.000 and former, 74A322301, at Y395.000

(1) Use subassembly U, view C, attached to station support board, (detail 116), view A, and weld assembly, index pin, (detail 23), view C, for location of ramp assembly at X28.360, Y394.200, and Z114.800.

(2) Use subassembly S, view B, attached to station support board, (detail 116) and weld assembly, index pin, (detail 20), for location of ramp assembly at X20.000 Y395.000, and Z82.500.

(3) Use subassembly W, view G, attached to station support board, (detail 116) for location of ramp assembly at X27.701 which is center of pin, 74A322409, protruding above upper edge of ramp assembly at Y383.000.

b. Former assembly, 74A322341; which includes former, 74A322300, at Y395.000 for LEX at Y395.000.

(1) Use subassembly J, view F, attached to station support board, (detail 116) for location of former at Y49.000, Y395.000, and Z110.800.

(2) Use subassembly P, view E, attached to station support board, (detail 116) and index pin, (detail 141), view E, for location of former at X31.118, Y395.000, and Z112.855.

(3) Use subassembly M, view D, attached to station support board, (detail 116) for location of former at Y395.000.

(4) Use subassembly L attached to station support board, (detail 116) for location of former, 74A322300-2018, only at Y395.000.

c. Support, 74A322302, with-spherical bearing, ST3M212-19, for former assembly, 74A322341, at Y395.000 for LEX. Use subassembly J attached to station support board, (detail 116) and index pin, (detail 134) for location of bearing in support at X49.000, and Z110.800.

d. Former, 74A322311 at Y419.000.

(1) Use subassembly Z, view K, attached to subassembly G, station support board, view H, and index pin, (detail 151) for location of former at X28.100, Y419.120, and Z108.080.

(2) Use subassembly AB, view J, attached to subassembly G, station support board and index pin, (detail 151) for location of former at X23.000, Y419.120, and Z76.000.

(3) Use subassembly AD, view M, attached to subassembly G, station support board for location of former Y419.050.

(4) Use subassembly AF, view L, attached to subassembly G, station support board for location of former at Y419.000.

e. Upper former, 74A322402, for truss plane number 1 between Y395.000 and Y419.000. Use subassembly AH, view H, attached to subassembly G, station support board, and angle, (detail 157) for location of upper former at truss plane number 1.

f. Upper mid former, 74A322403, for truss plane number 2 between Y395.000 and Y419.000. Use subassembly AH attached to subassembly G, station support board and angle, (detail 158) for location of upper mid former at truss plane number 2.

g. Lower mid former, 74A322404, for truss plane number 3 between Y395.000 and Y419.000. Use subassembly AH attached to subassembly G, station support board, and angle, (detail 159) for location of lower mid former at truss plane number 3.

h. Lower former, 74A322405, for truss plane number 4, between Y395.000 and Y419.000. Use subassembly AH attached to subassembly G, station support board and angle, (details 280 and 281) for location of lower former at truss plane number 4.

i. Former, 74A322321, at station Y431.000.

(1) Use subassembly AU, view R, attached to subassembly E, station support board, view N, and index pin, (detail 195) for location of former at X26.500, Y431.120, and Z75.000.

(2) Use subassembly AW, view P, attached to subassembly E, station support board and index pin, (detail 195) for location of former at X25.000, Y431.120, and Z75.000.

(3) Use subassembly AZ, view T, attached to subassembly E, station support board for location of former at Y431.050.

(4) Use subassembly BB, view S, attached to subassembly E, station support board for location of former at Y431.050.

j . Former, 74A322331, at Y442.000.

(1) Use subassembly BD, view W, attached to station support board, (detail 114), view U, and index shoulder screw, (detail 233) for location of former at X25.000, Y442.100, and Z101.000.

(2) Use subassembly BF, view V, attached to station support board, (detail 114) and index shoulder screw, (detail 236) for location of former at X24.000, Y442.000, and Z75.500.

(3) Use subassembly BH, view AB, attached to station support board, (detail 114) for location of former at Y442.000.

k. Support, 74A322363, at Y395.900, which is part of former assembly, 74A322341, and supports hinge of door, 74A322659, of LEX. Use subassembly CS, view AA, attached to station support board, (detail 116) and two index pins, (detail 167) for location of hinge at Y395.000.

l. Inner cap, 74A322107, and outer cap, 74A322110, of inboard MLG drag beam. Use subassembly BK, view Z, attached to station support board, (detail 114) for location of inner cap and outer cap to inboard MLG trunnion drag beam reference plane and aft end of part.

m. Outer cap, 74A322505, of outboard MLG drag beam. Use subassembly BM, view Y, attached to station support board, (detail 114) for location of outer cap to outboard MLG trunnion drag beam reference plane and aft end of part.

n. Outer cap, 74A322109, of lower outboard longeron. Use subassembly BP, view X, attached to station support board, (detail 114) for location of outer cap to lower outboard longeron reference plane and aft end of part.

o. Longerons, 74A322105, of side longerons at Z91.500. Use subassembly BS, view AC, attached to station support board, (detail 114) for location of longeron reference plane which is Z91.500 and aft end of part.

p. At this point depot personnel may do required removal, replacement, or repair of damaged inlet structure using approved procedures and quality workmanship. For hole preparation (A1-F18AC-SRM-200, WP004 16).

8. SCRIBING AFT THEORETICAL SPLICE LINE ON INNER AND OUTER DUCT SKINS. See figure 6 and table 1. After installing inner duct skin, 74A322800, and outer duct skin, 74A322801, use subassembly BU, view A, attached to station support board, (detail 114), and flat scribe, (detail 246), view G, for scribing aft theoretical splice line, aft trim, on both inner and outer skins at Y442.000.

9. SCRIBING AFT THEORETICAL SPLICE LINE ON SKINS OR SKIN ASSEMBLIES, 74A322710. Use following subassemblies for scribing

aft theoretical splice line, aft trim, on installed skins or skin assemblies, 74A322710;

a. Skin assemblies, 74A322710-1040 and -1042; use subassembly BW, view D, attached to station support board, (detail 114).

b. Slide diverter, 74A322710-2112, -2148, -2182, or -2184; use subassembly BZ, view B, attached to station support board, (detail 114).

c. Skin assemblies, 74A322710-1020 and -1024; use subassembly CB, view E, attached to station support board, (detail 114).

d. Skin assembly, 74A322710-1038; use subassembly CD, view F, attached to station support board, (detail 114).

e. Side diverter skins, 74A322710-2007 and -2112; use subassembly CF, view C, attached to station support board, detail (-114).

10. SEPARATION OF INLET INTO FOUR UNITS FOR ACCESSIBILITY WHILE REWORKING. See figure 7 and table 1.

NOTE

Three of four station support boards have alternate locations and index other than original location.

S -114 station support board -Y496.000

S subassembly E, station support board-Y463.000

S -116 station support board -Y378.000

a. Former, 74A322331, at Y442.000 and all structure between Y431.000 and Y453.000. All structure is attached to station support board, (detail 114), view D at Y454.500.

b. Former, 74A322321, at Y431.000 and all structure between Y419.000 and Y431.000. All locators for structure are attached to subassembly E, view C, station support board (details 118 and 120) at Y433.500.

c. Former 74A322311, at Y419.000 and all structure between Y395.000 and Y419.000. All locators are attached to subassembly G, view B, station support board (details 122 and 124) at Y422.500.

d. Ramp Assembly, 74A322720, which includes former, 74A322301, at Y395.000 and former, 74A322341, for LEX at Y395.000. All locators are

attached to station support board, (detail 116), view A, at Y398.000.

11. REPAIR TO INLET FOR INSTALLATION ON SAME AIRCRAFT. See figure 8. If inlet is to be reinstalled on same aircraft and if any structure of inlet carrying fuselage attach holes was replaced, female laminate hole transfer hood, subassembly AM, view A, and male laminate drill hood, subassembly AK, view C, will be required to locate fastener holes on new structure.

NOTE

Subassembly AM is a loose assembly. It is used only for transferring location of existing holes from fuselage to subassembly AK. These subassemblies are used on maintenance fixture for drilling attach holes into new structure, of inlet, replaced because of damage.

a. The maintenance fixture allows existing fuselage holes to be picked up by using subassembly AM along with index pins, (details 200 through 203), view D and table 5, along with potable nurloc liner bushings, (detail 199), table 6.

b. Position subassembly AM before potting of nurloc bushings, (detail 199) and table 6. Index subassembly to forward attach hole at Y387.500 and Z97.043, coordinate aft tooling ball for Z location only along mating mold line surfaces.

c. Following substeps are used for transferring fuselage hole pattern from subassembly AM to subassembly AK before drilling holes into replaced structure.

(1) Remove aluminum shims, (details 173 through 180) from subassembly AK.

(2) Coordinate subassembly AK to subassembly AM by pinning two index pins, (detail 167) through bushings, (detail 204) of both subassemblies.

(3) Use index pins, (details 200 through 203) for potting unilock liner bushings, (detail 181) into subassembly AK from existing bushed holes in subassembly AM.

(4) Pot bushings (A1-F18AC-SRM-200, WP004 16), Hole Locating Plate Set Accessory Kit, RE374000002-1.

(5) After potting bushings into subassembly AK reinstall aluminum shims, (details 173 through 180) table 8, into subassembly AK.

d. Prepare maintenance fixture subassembly C, per substeps below, before drilling attach holes into new inlet structure.

(1) Remove upper half of station support boards, subassemblies E and G, (details 118 and 122) from maintenance fixture or slide clear of area as shown in figure 1.

(2) Locate and index inlet at Y442. 000, see figure 5, to subassemblies BD, BF, and BH views W, and X and AB.

(3) See figure 1. Slide station support board, (detail 116), forward to clear subassembly AK when installed.

(4) Install subassembly CU, view E, on maintenance fixture, subassembly C, and index inlet at Y395.000 to subassembly CU and subassembly C, using index pin, (detail 134), view E.

(5) Install subassembly AK onto maintenance fixture, and locate subassembly AK to inlet by indexing any existing attach holes in inlet using index pins, (details 193 through 197) table 7 along with mold line surfaces. If all fastener holes need to be drilled in inlet, then use tooling ball reference system of subassembly AK for location to inlet along with mating mold line surfaces.

e. Drill all required attach holes in inlet using drill bushings, (details 182 through 186) and index pins, (details 193 through 197) in subassembly AK.

12. REPAIR TO INLET BEING SPARED. If inlet being repaired is to be spared for future use on another aircraft structure with 16 or 17 fuselage fastener attach holes, must be replaced and left blank, not drilled.

13. USING MAINTENANCE FIXTURE FOR LOCATING AND DRILLING ATTACH HOLE PATTERN IN UPPER LEX SUBSTRUCTURE FOR ACCESS COVER 74A322609. See figure 9 and table 1.

a. Use following two methods for locating subassembly AP, view A, on upper LEX substructure of intake before drilling hole pattern for access cover, 74A322609, located between Y419.000 and Y431.000, using female laminate drill hood, subassembly AP.

(1) Locate subassembly AP on substructure of upper LEX by indexing into any existing attach holes, farther apart the better, using index pins, (detail 216) and mate mold line with surfaces.

(2) If all attach holes in substructure of upper LEX need to be drilled, locate subassembly AP at aft end against former, 74A322320, two places, with index pin, (detail 217) and against longeron, 74A322106, one place, with index pin, (detail 209) and mate with mold line surfaces.

b. Drill all required attach holes in substructure of upper LEX for access cover, 74A322609, using drill bushings, (details 211 through 214) and index pins, (details 215 and 216) in subassembly AP.

14. USING MAINTENANCE FIXTURE FOR LOCATING AND DRILLING ATTACH HOLE PATTERN IN LOWER INLET SUBSTRUCTURE FOR ACCESS COVER, 74A322680, BETWEEN Y442.000 AND Y453.000, AFTER INLET IS INSTALLED. See figure 10 and table 1. Use subassembly AS and following steps;

a. Locate subassembly AS on substructure of lower inlet by pinning, index pins, (detail 195) into tooling holes number 35 and 39 in bulkhead, 74A324202, at Y453.000.

b. Index any existing holes of substructure which was not replaced.

c. Drill all required holes in substructure of inlet using drill bushings, (details 225 through 227) and index pins, (detail 195).

15. REMOVING INLET FROM MAINTENANCE FIXTURE. See figure 4.

a. Remove subassembly J, view G, from (detail 116), view F, station support board at Y395.000, by removing step pin, (detail 134).

b. Remove subassemblies BD, BH, and BF, views C, D, and E from Y442.000 station support board, (detail 113), view B.

c. Remove any other subassemblies, step pins, or index pins that may still be attached to station support boards or structure.

d. Slide Y395.000 station support board, (detail 114), view F, forward to clear area required to raise inlet from maintenance fixture.

e. Slide Y442.000 station support board, (detail 114), view B, aft to clear area required to raise inlet from maintenance fixture.

f. Remove hardware holding upper part, (detail 122), of station support board, subassembly G, to lower part, (detail 124), figure 4, view B.

g. Remove hardware holding upper part, (detail 118), of station support board, subassembly E, to lower part, (detail 120), view C.

h. Slide upper part of Y431.000 station support board, (detail 118), of subassembly E and upper part of Y419.000 station support board, (detail 122), of subassembly G aft to clear area required to raise inlet from maintenance fixture.

i. Maintain position of lower part of Y431.000 station support board, (detail 120), subassembly E and Y419.000 station support board, (detail 124), of subassembly G for supporting inlet until raised out from maintenance fixture.

j. Inlet is now ready to be removed from maintenance fixture.

k. Attach sling.

l. Take up slack in sling so subassembly CW, figure 4, view A at Y419.000 station support board, (detail 124) can be removed.

m. Remove inlet from maintenance fixture.

16. REINSTALLING INLET ON AIRCRAFT.

a. Install inlet in alignment fixture (A1-F18AC-SRM-230, WP041 00).

b. Carefully move alignment fixture, with inlet installed, into position for installation, just forward of stovepipe, air inlet aft inner ducting.

c. Apply sealing compound, as required, when mating inlet to fuselage, as specified in specific structure repair manual.

d. Install 17 close tolerance titanium bolts; 15 are NAS674 and two are NAS675. This will attach inlet to fuselage. Forward bolt, through ECS lip duct, installs into ST3M726C4M platenut, while remaining bolts are secured with NAS1291 self-locking CRES nuts.

e. Attach 74A322351 support, which is located at Y383.000 and installed between lower ramp and

fuselage. Attaching hardware is NAS674V94D Bolt, two AN960PD416 washers, and AN310-C4 nut.

NOTE

At this point, inlet is attached to fuselage at four inlet former stations. Inlet no longer requires support from sling.

f. Remove sling.

g. Connect pneumatic, hydraulic, and electrical systems lines, which transmit interfuselage interface, per table 3.

h. Reinstall structure, as required, per table 2 and figure 3.

i. Reinstall skins (A1-F18AC-SRM-230, WP009 00).

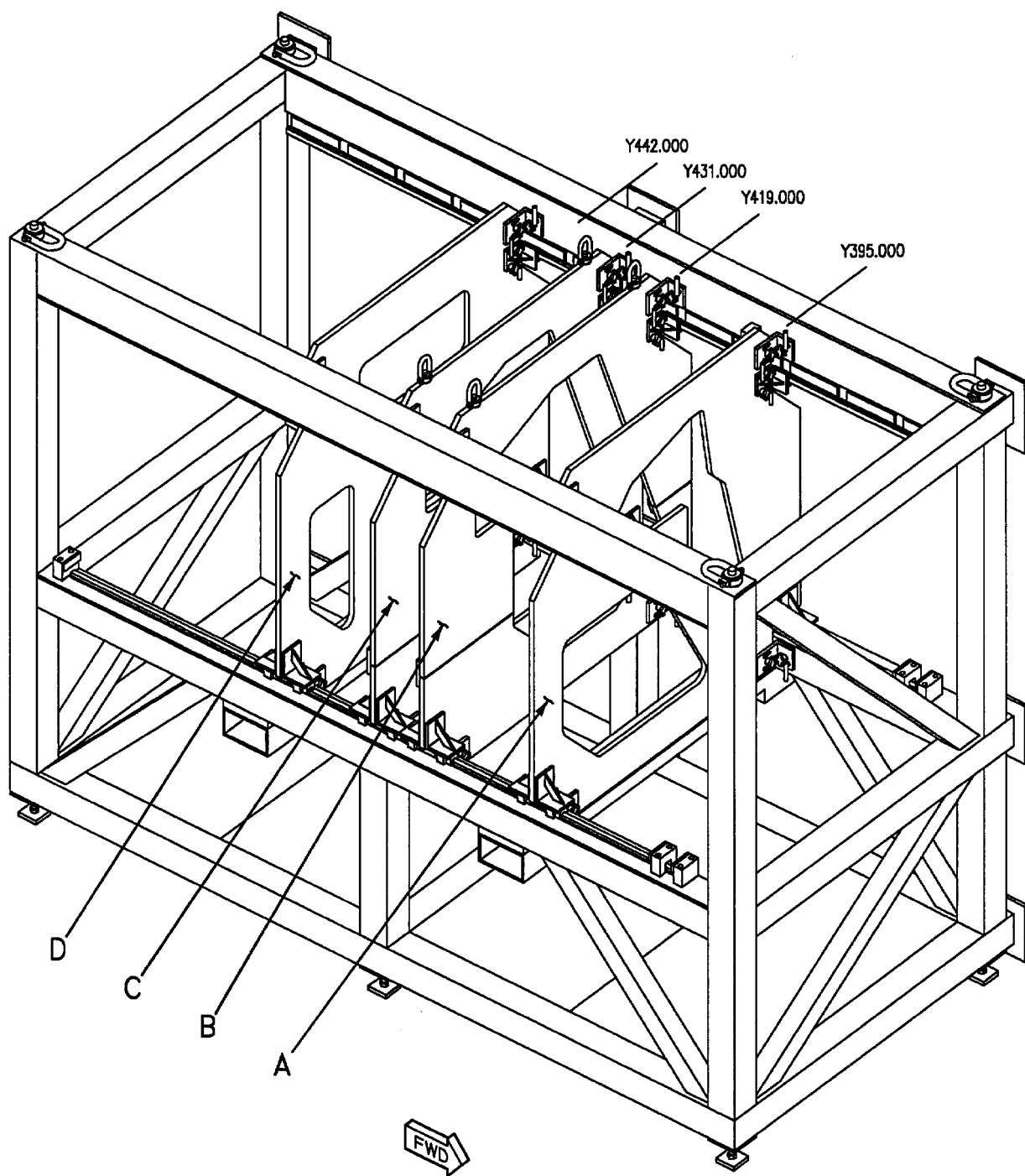
j. Reinstall all inlet access covers/doors (A1-F18AC-LMM-010).

k. Reinstall leading edge extension (A1-F18AC-SRM-220, WP041 01).

l. Reinstall number 2 fuel tank, F/A-18A/B, (A1-F18AC-460-300, WP019 00).

m. Reinstall number 1 fuel tank, F/A-18A, (A1-F18AC-460-300, WP011 00), and F/A-18B, (A1-F18AC-460-300, WP015 00).

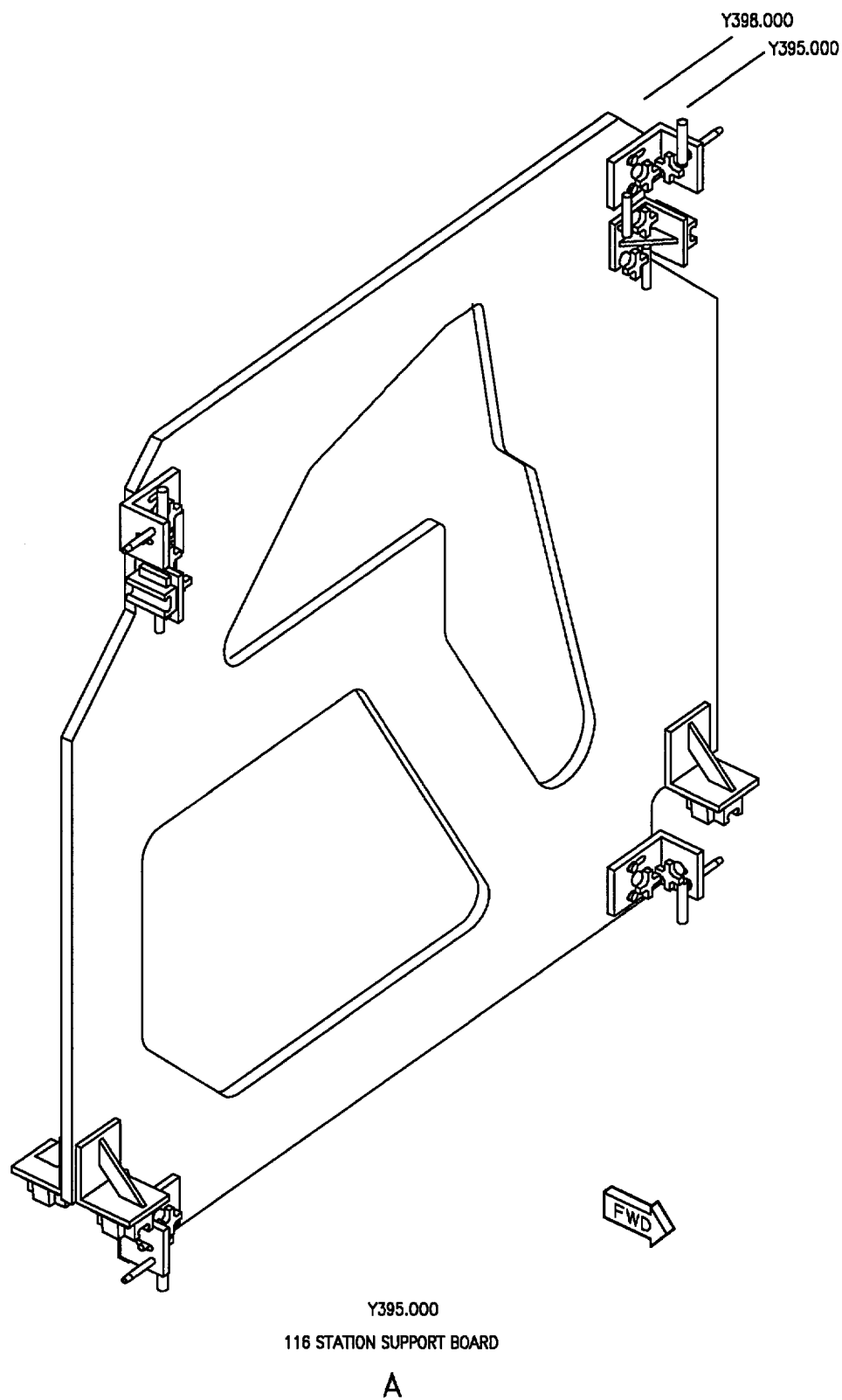
n. Apply finish system, as required, (A1-F18AC-SRM-500, WP030 00).



SUBASSEMBLY C
RIGHT INLET

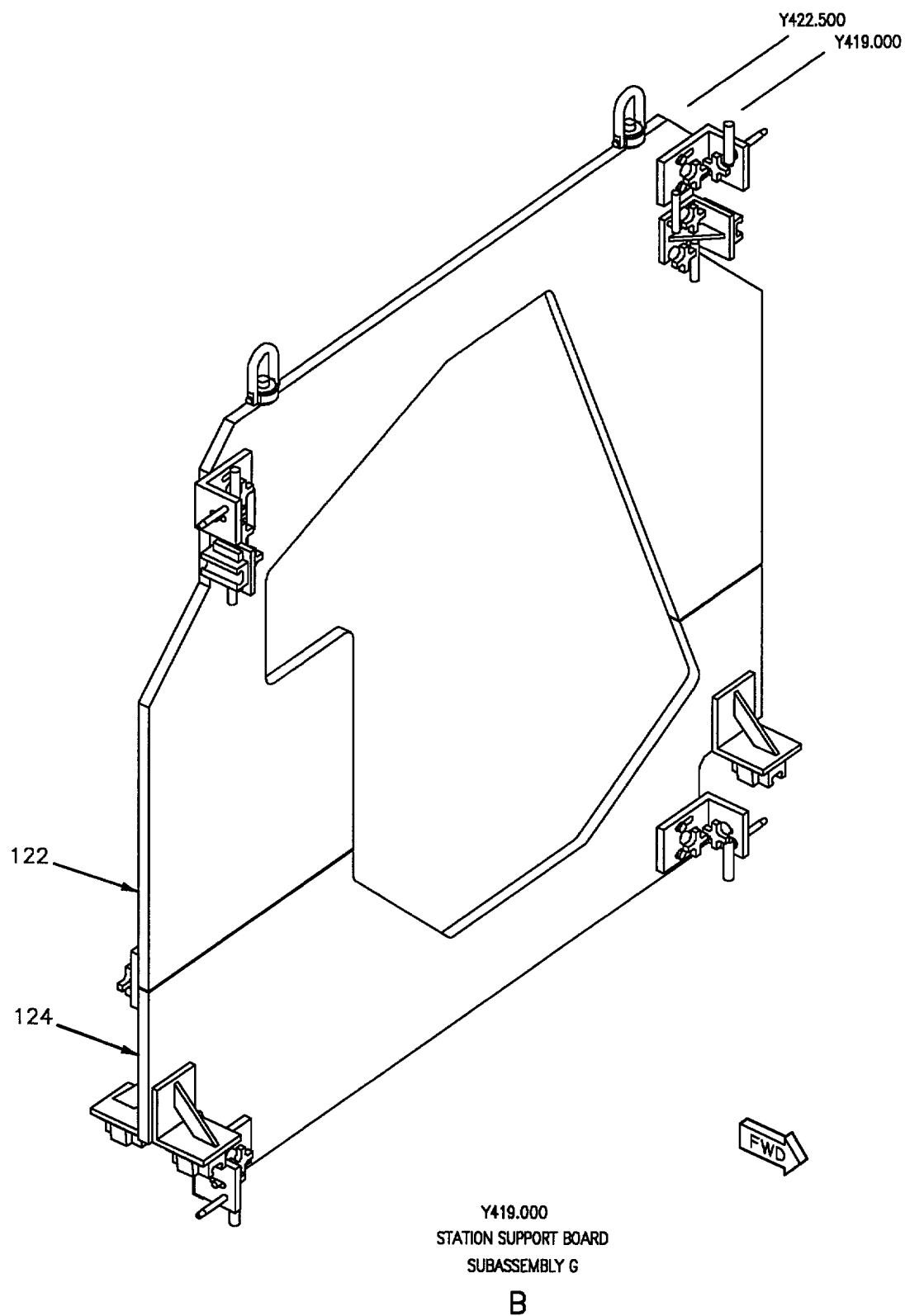
04000101

Figure 1. Engine Air Inlet Maintenance Fixture: RE174322020-2 RH (Sheet 1)



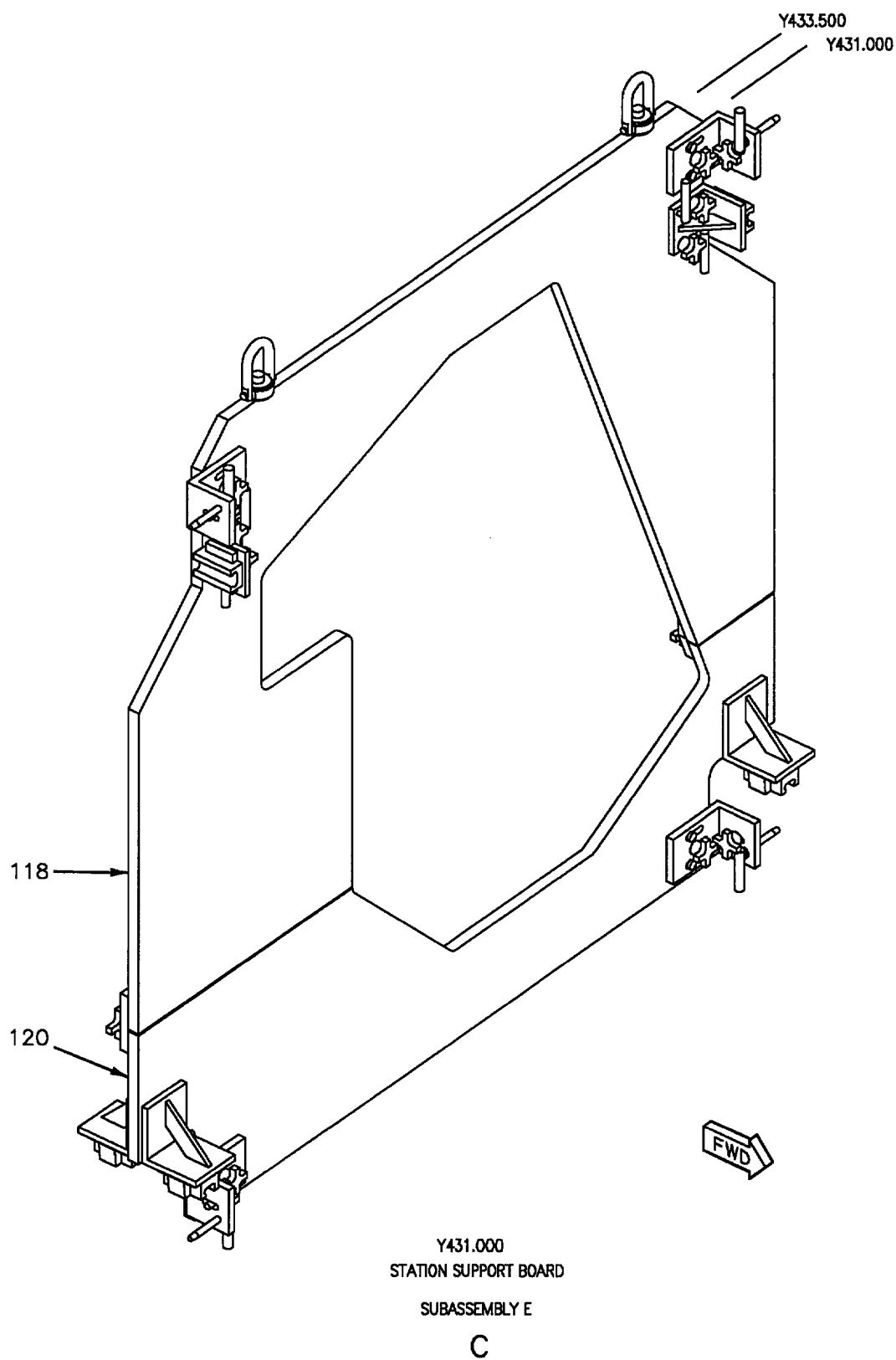
04000102

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-2 RH (Sheet 2)



04000103

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-2 RH (Sheet 3)



04000104

Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-2 RH (Sheet 4)

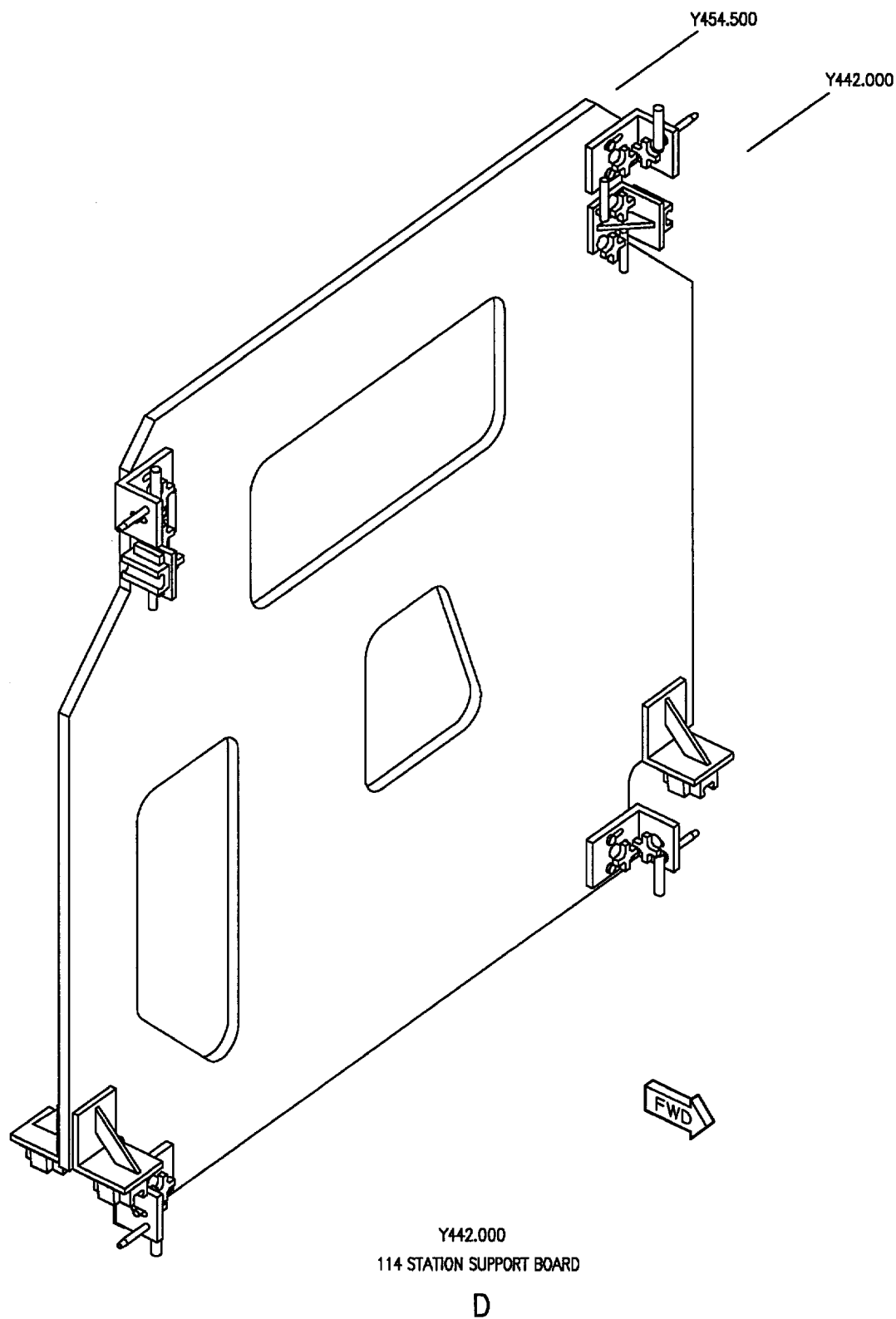
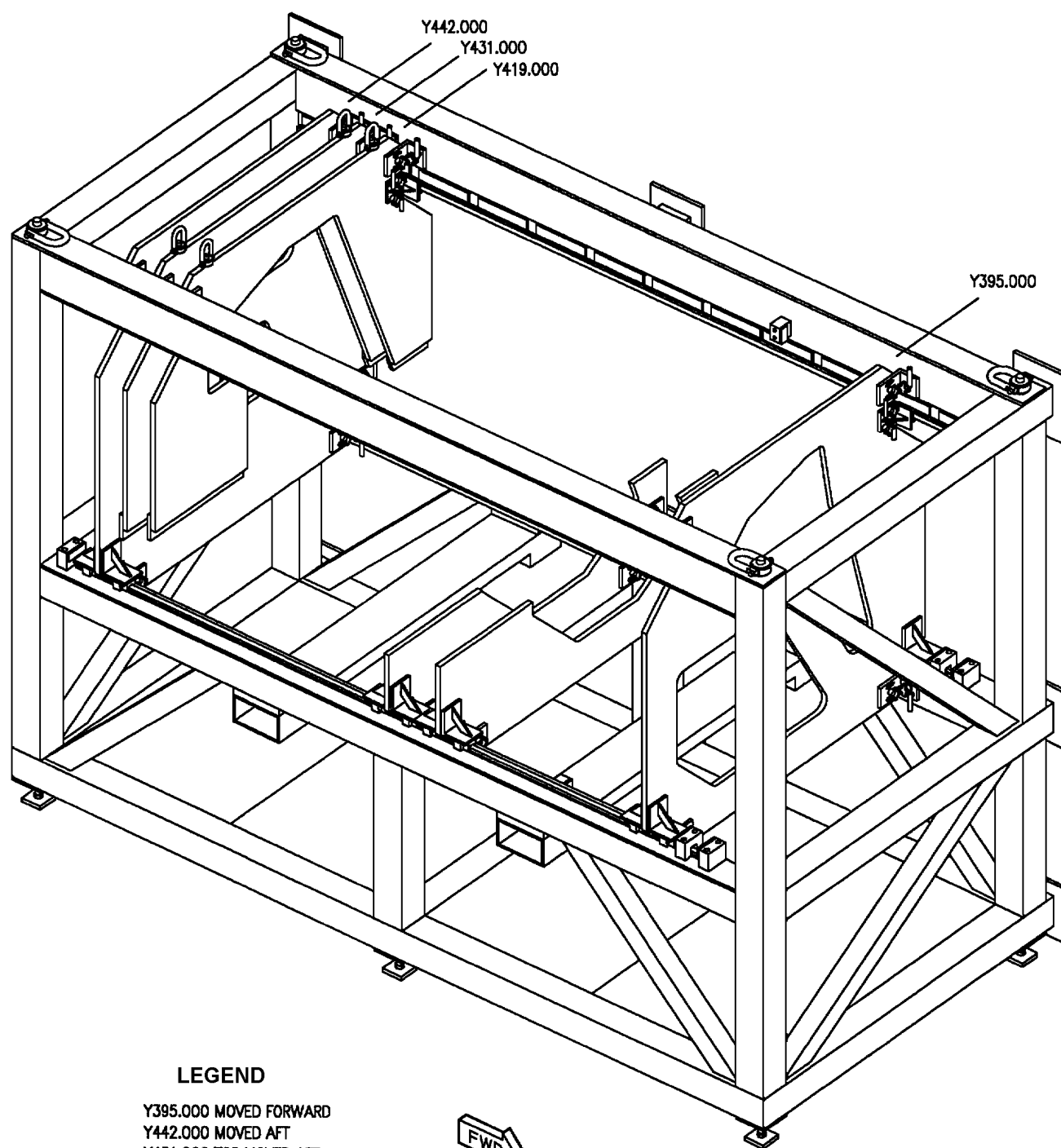


Figure 1. Engine Air Inlet Maintenance Fixture; RE174322020-2 RH (Sheet 5)



040002

Figure 2. Engine Air Inlet Maintenance Fixture Support Boards; Prepared to Receive Inlet

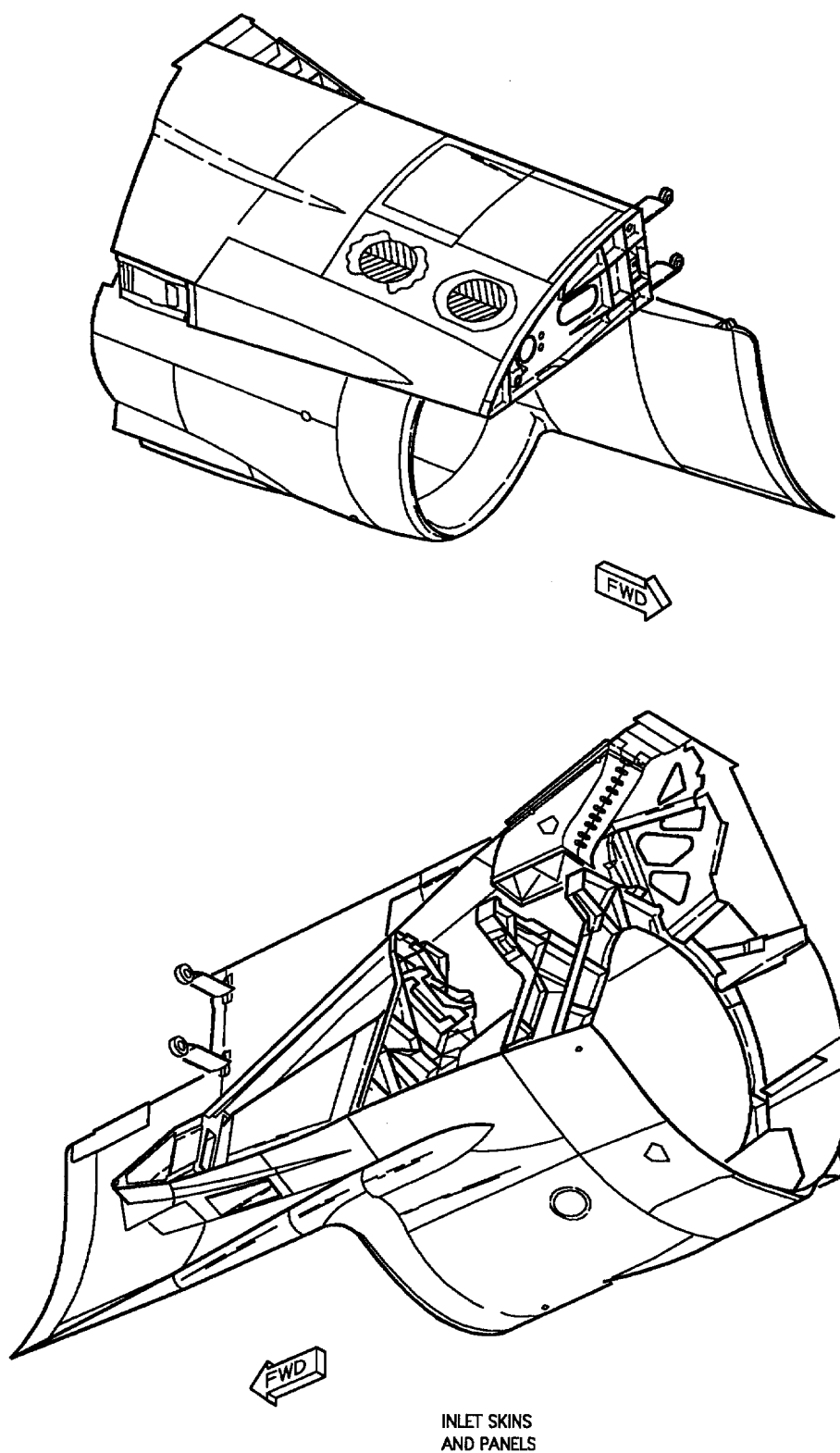


Figure 3. Removal of Inlet (Sheet 1)

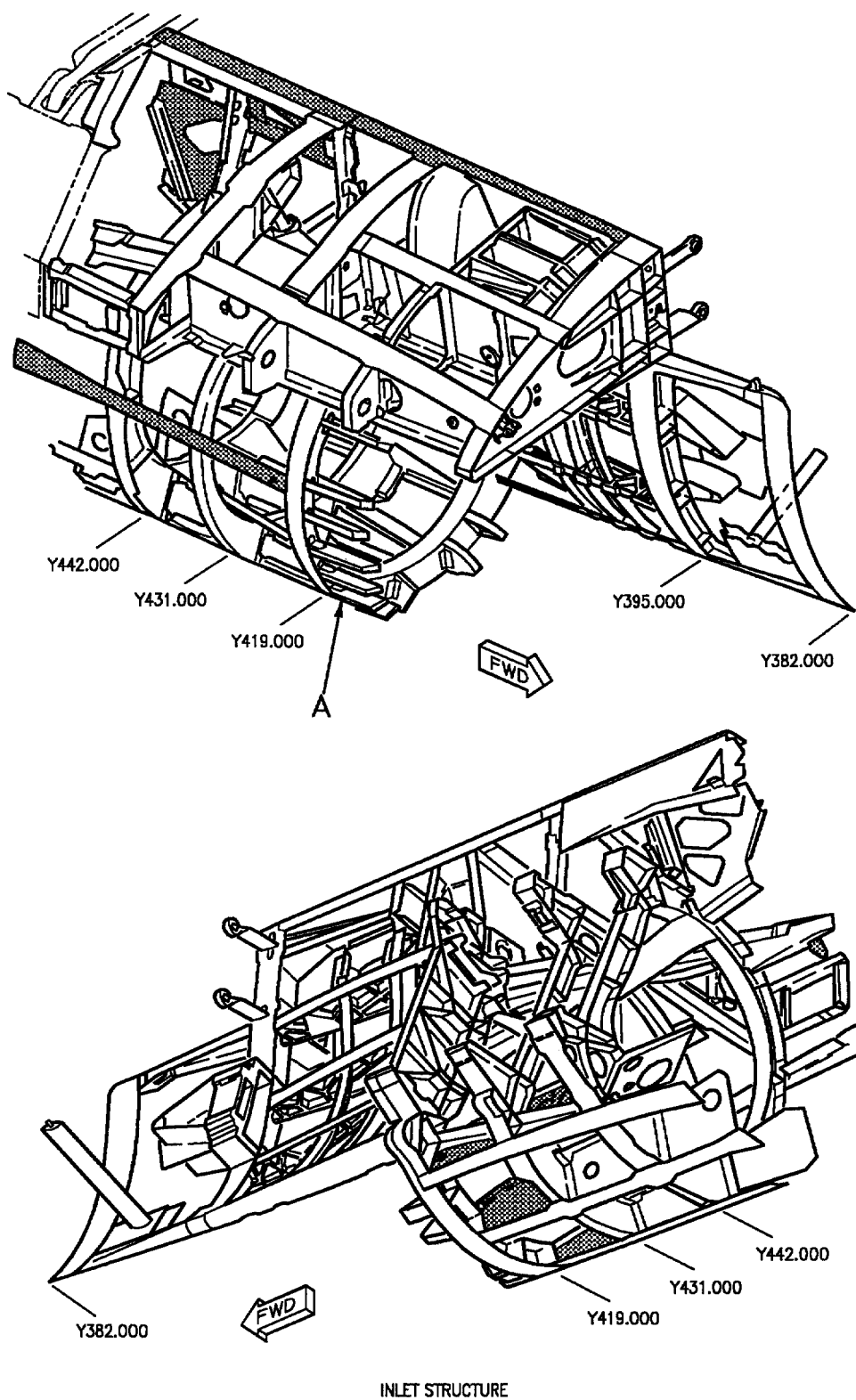
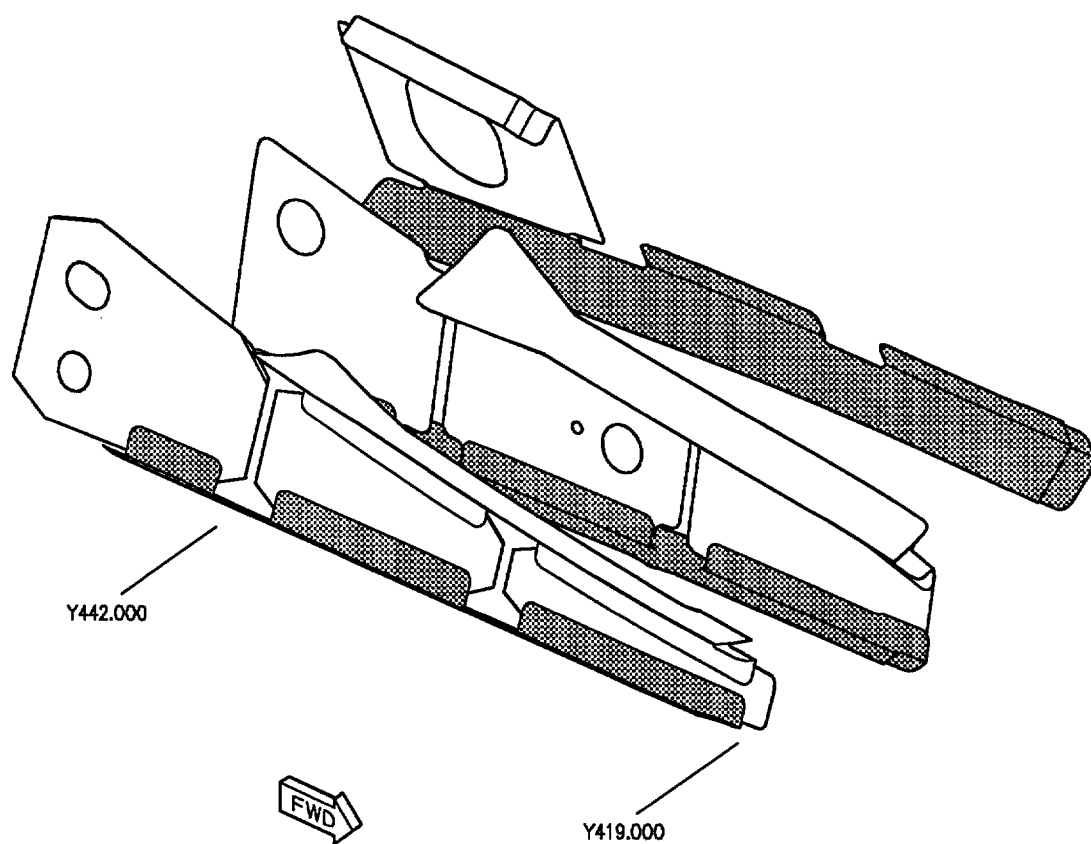


Figure 3. Removal of Inlet (Sheet 2)



A

Figure 3. Removal of Inlet (Sheet 3)

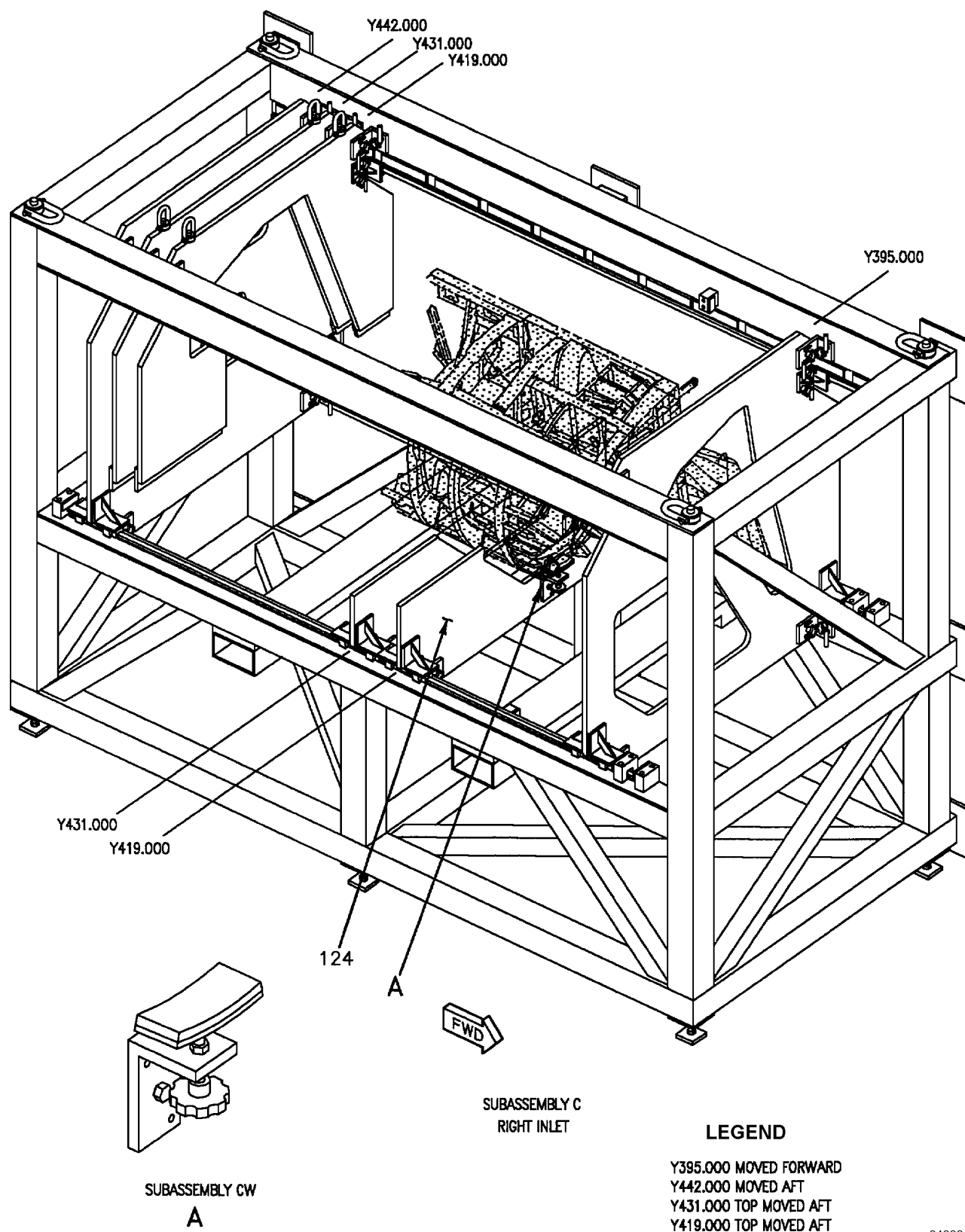
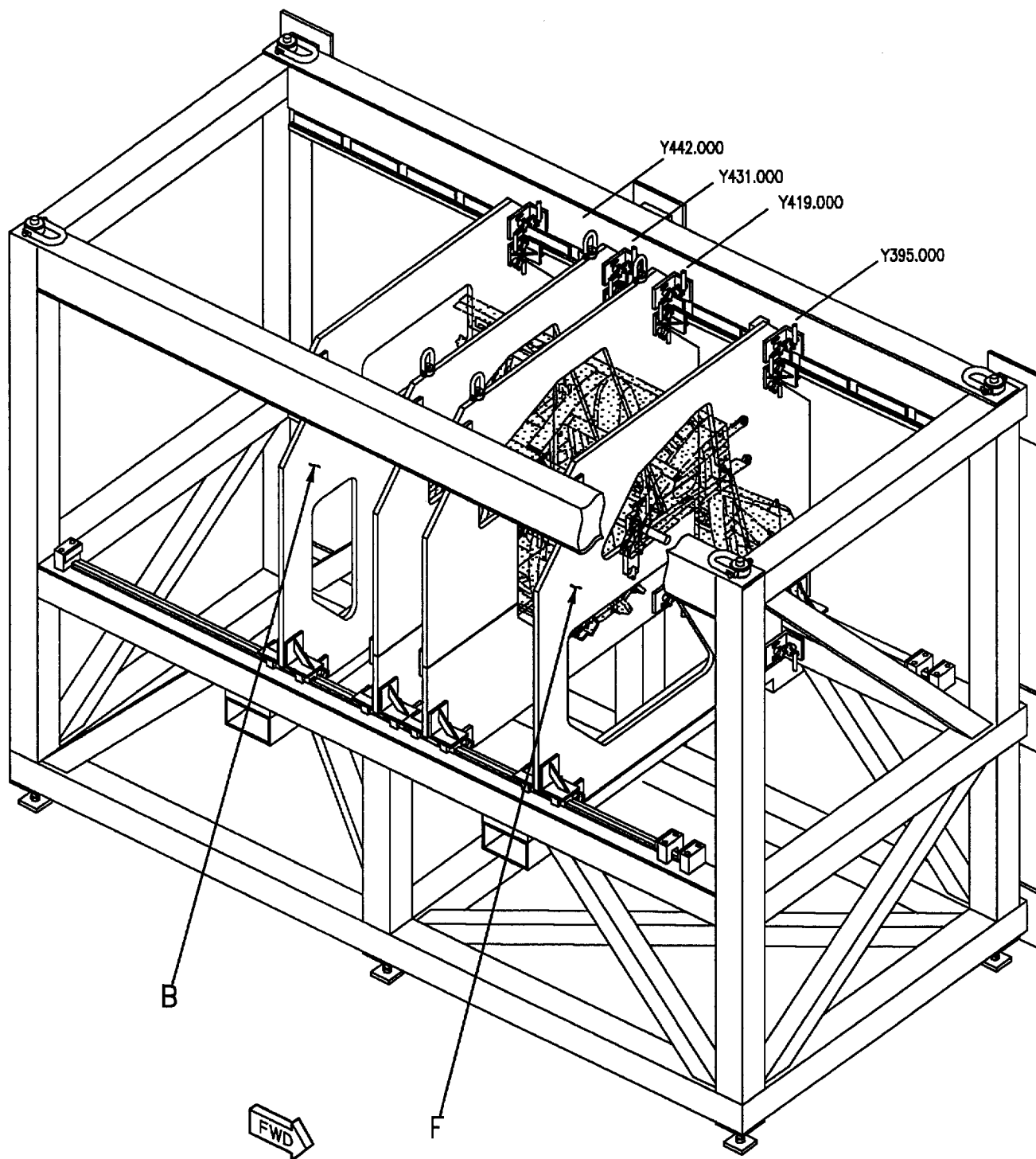


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 1)



INLET INSTALLED IN MAINTENANCE FIXTURE
SUBASSEMBLY C
RIGHT INLET

Figure 4. Installing Inlet in Maintenance Fixture (Sheet 2)

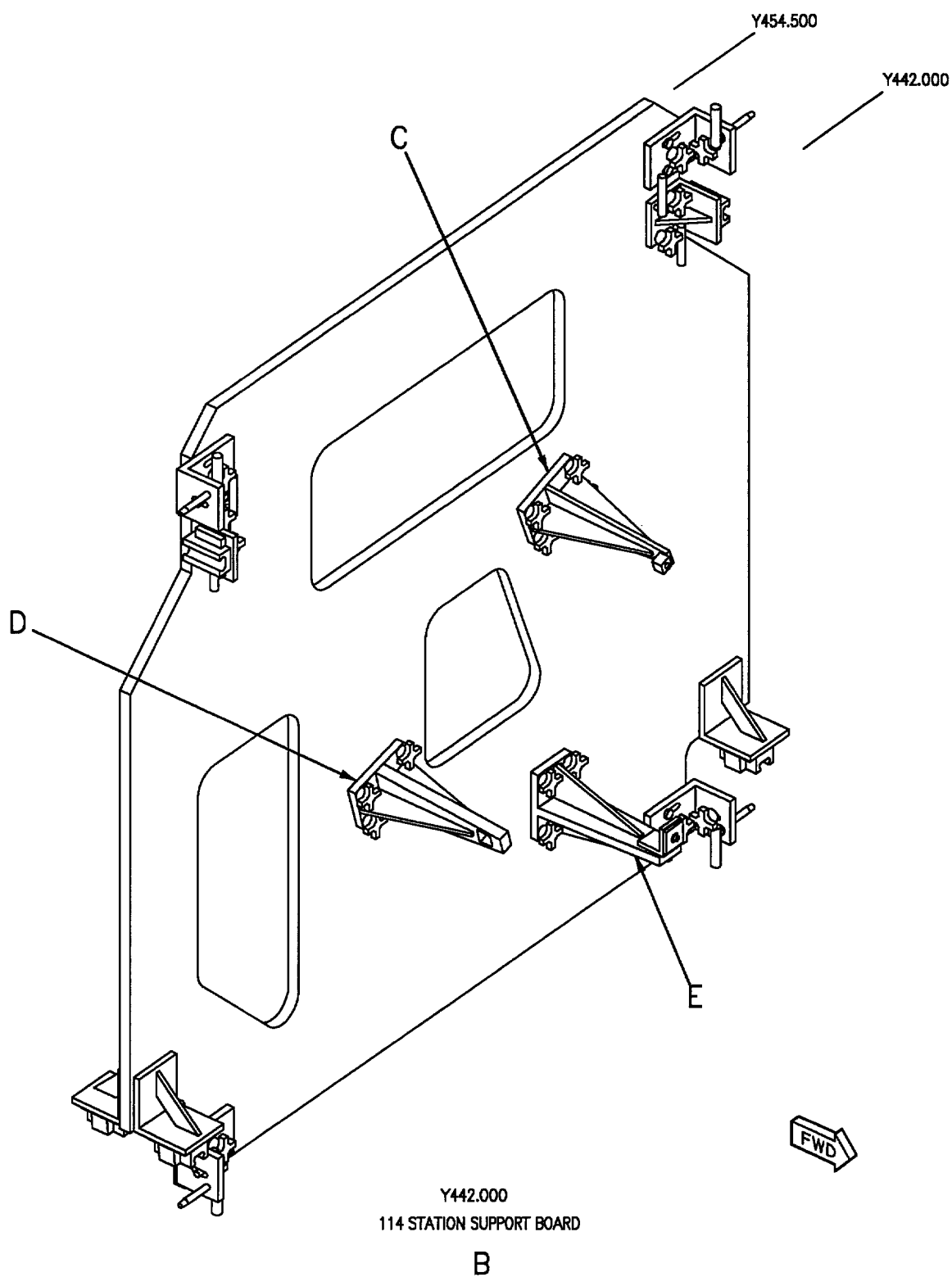


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 3)

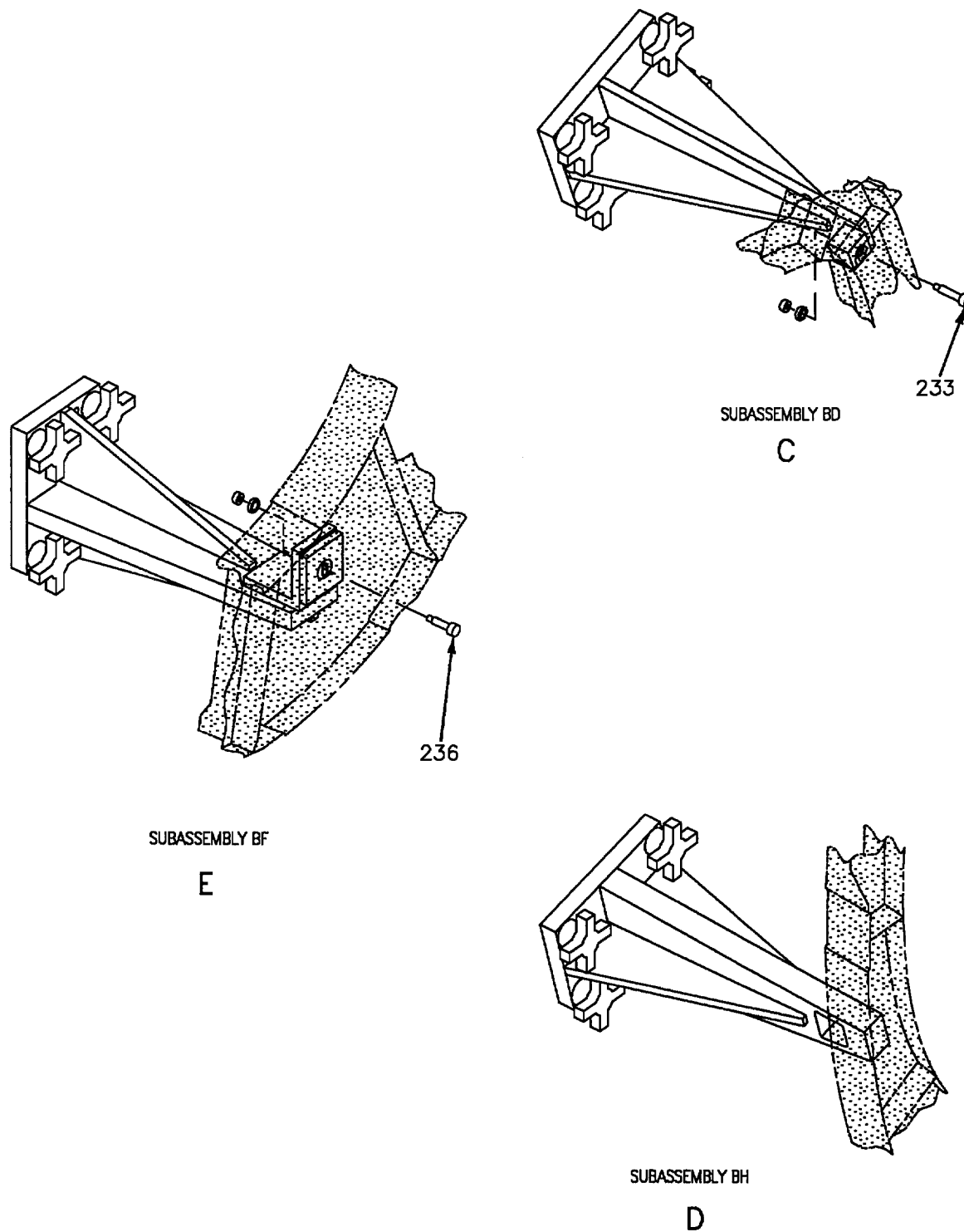


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 4)

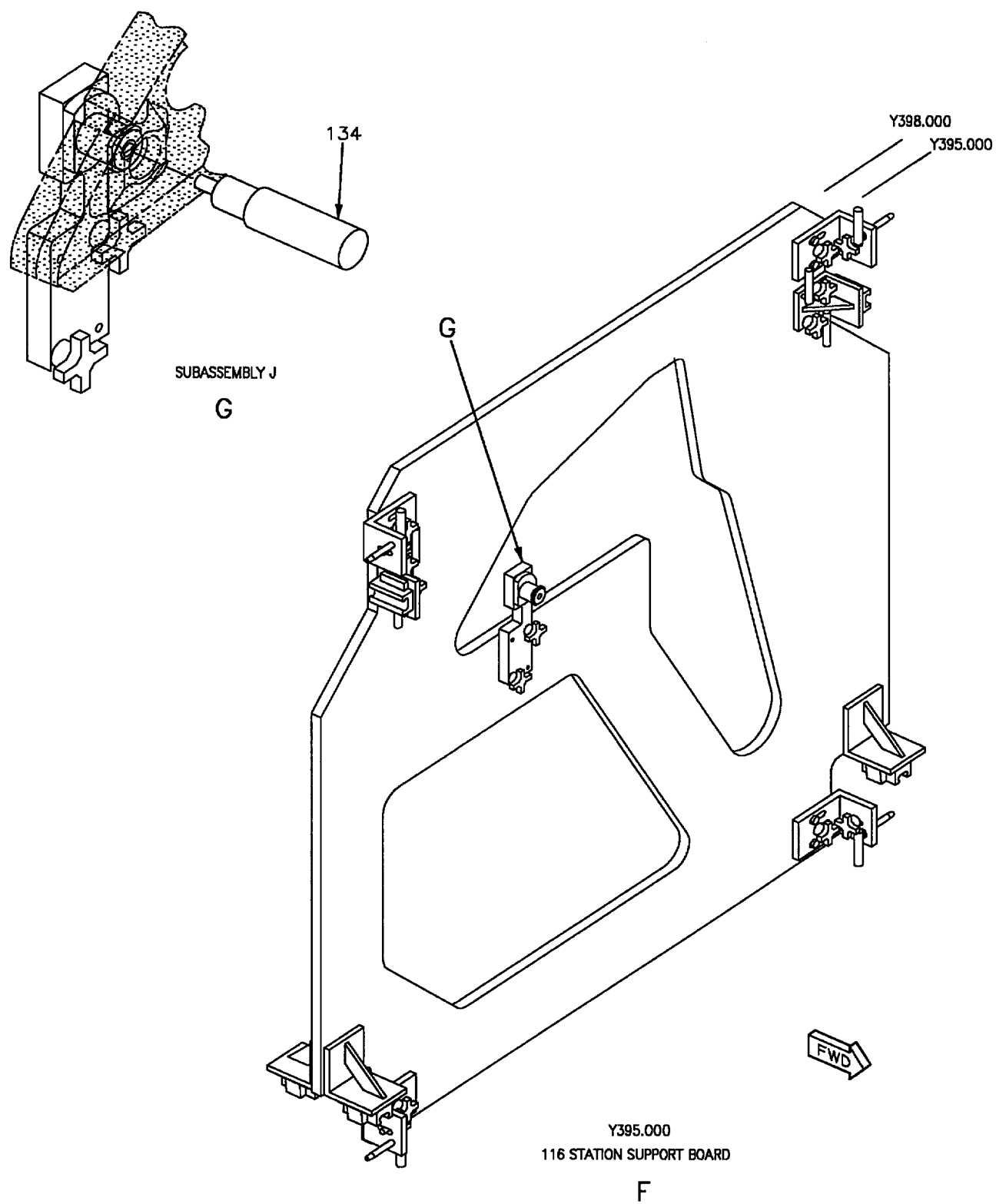
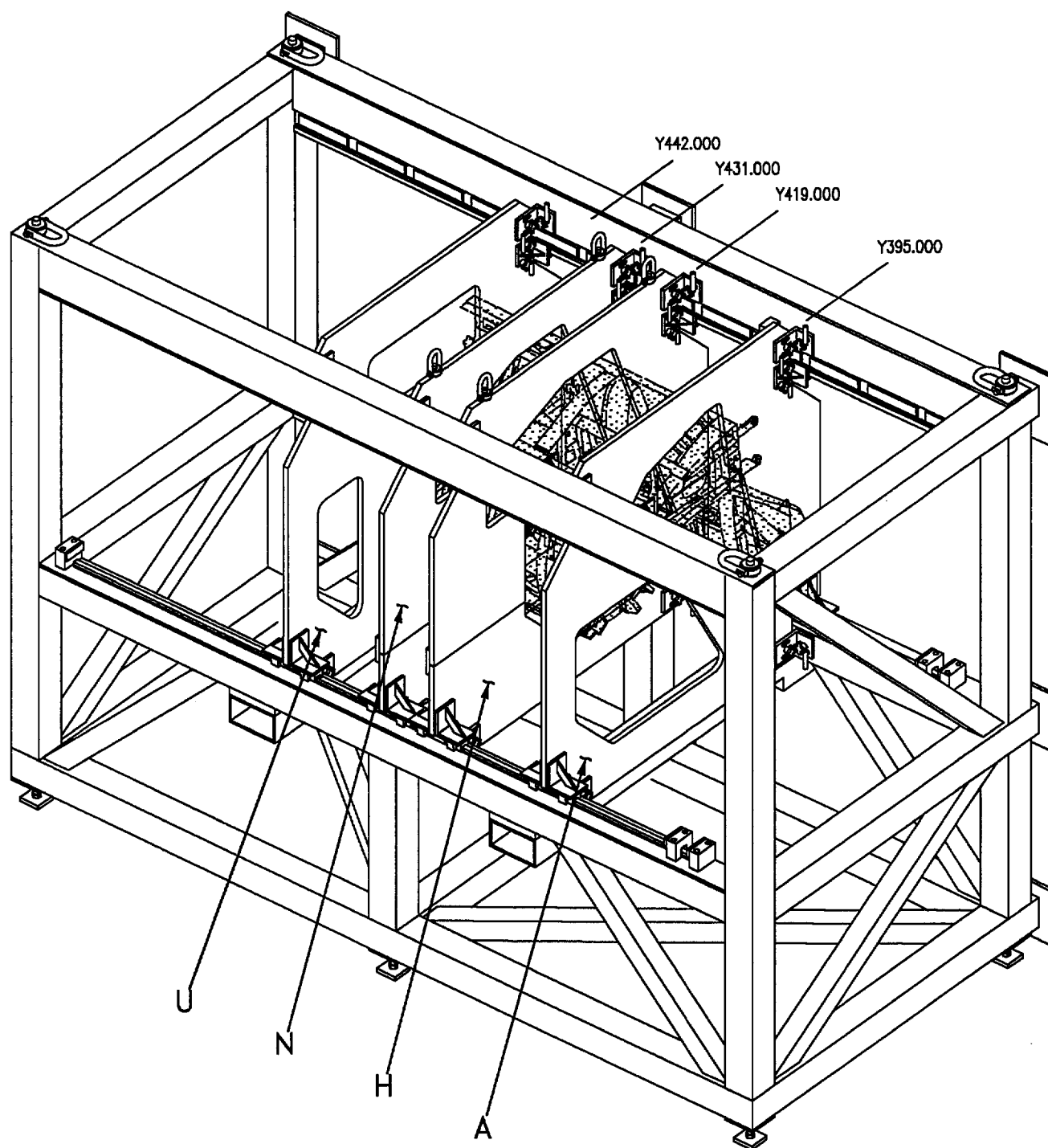


Figure 4. Installing Inlet in Maintenance Fixture (Sheet 5)



SUBASSEMBLY C
RIGHT INLET



04000501

Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 1)

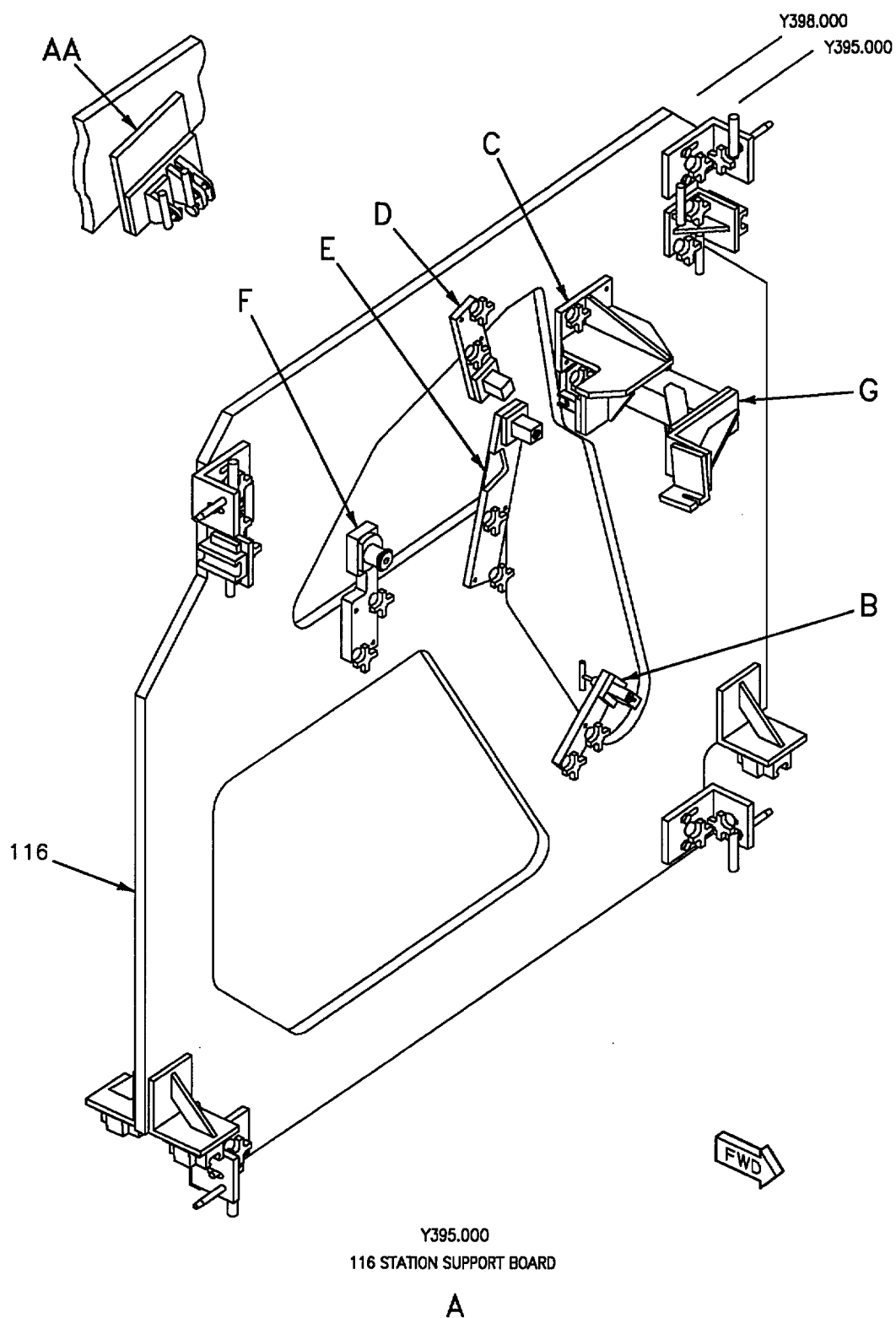


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 2)

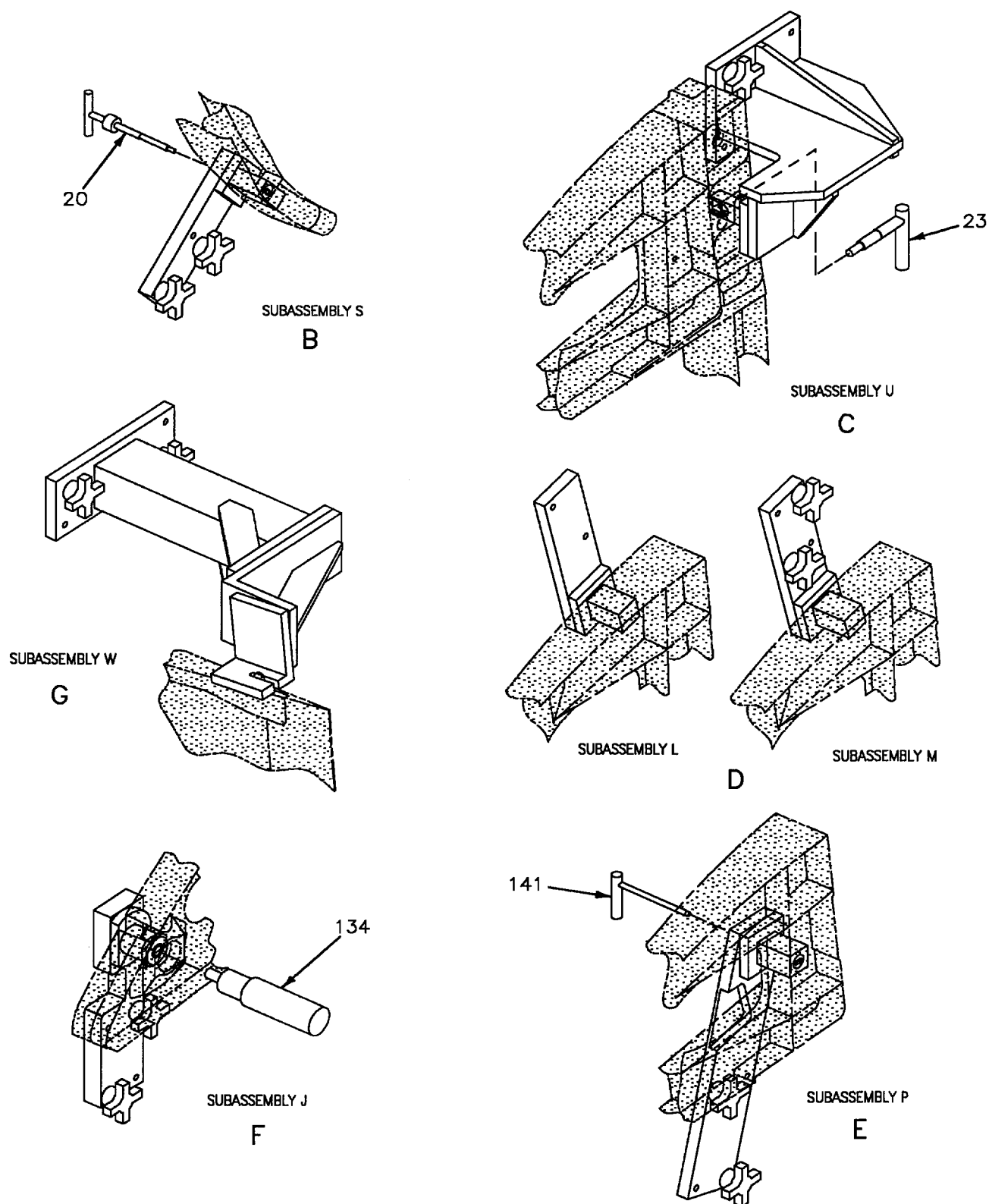


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 3)

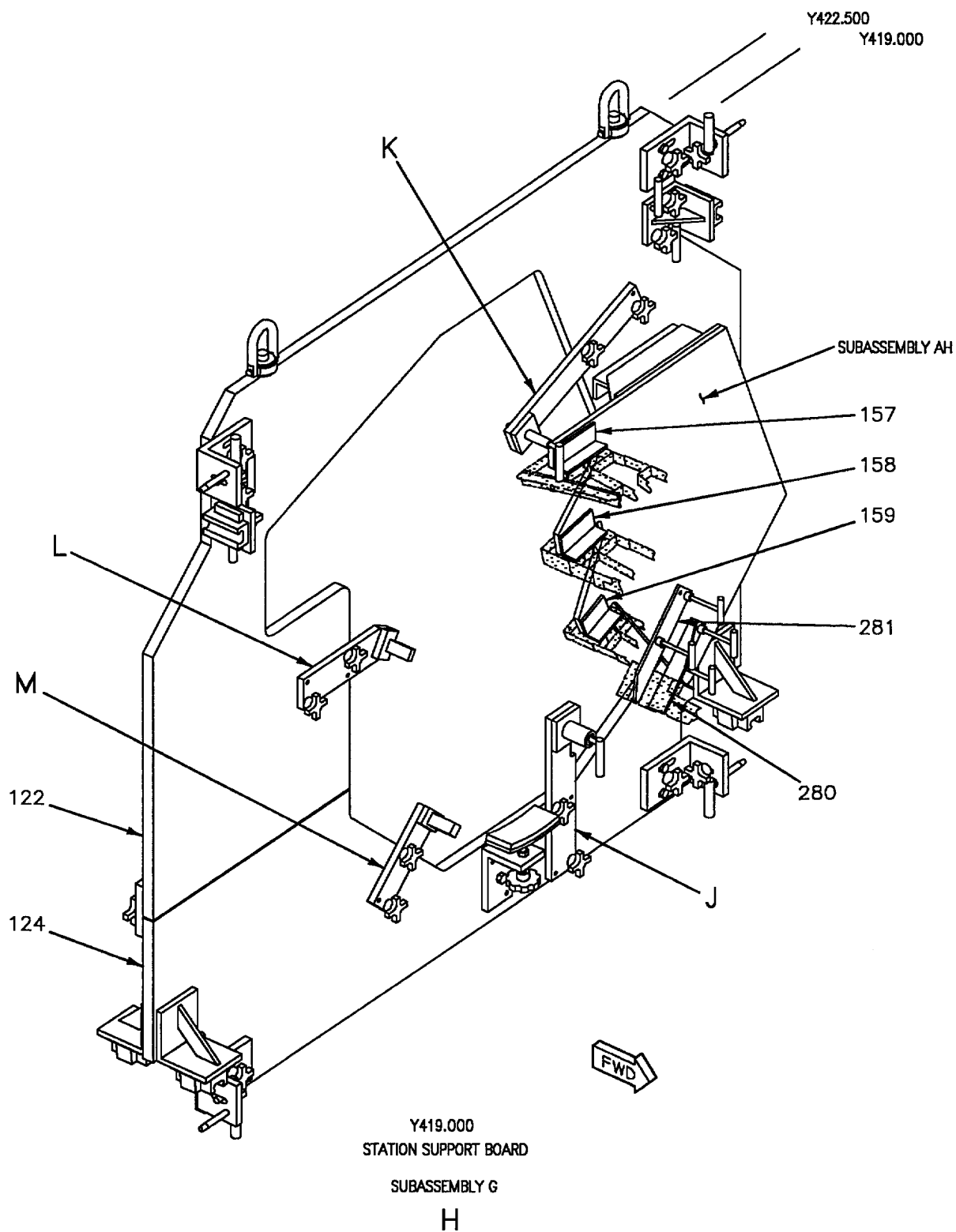


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 4)

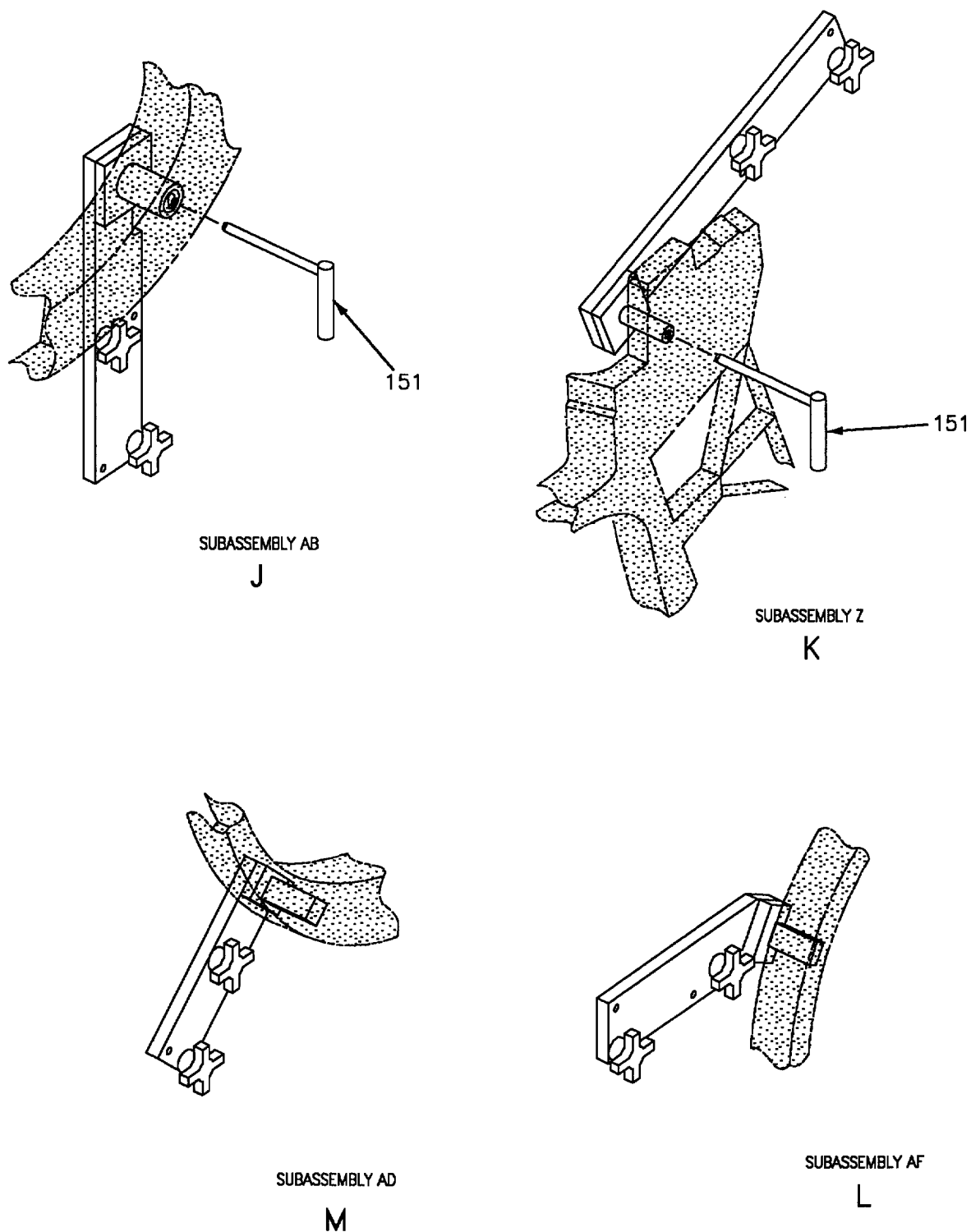


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 5)

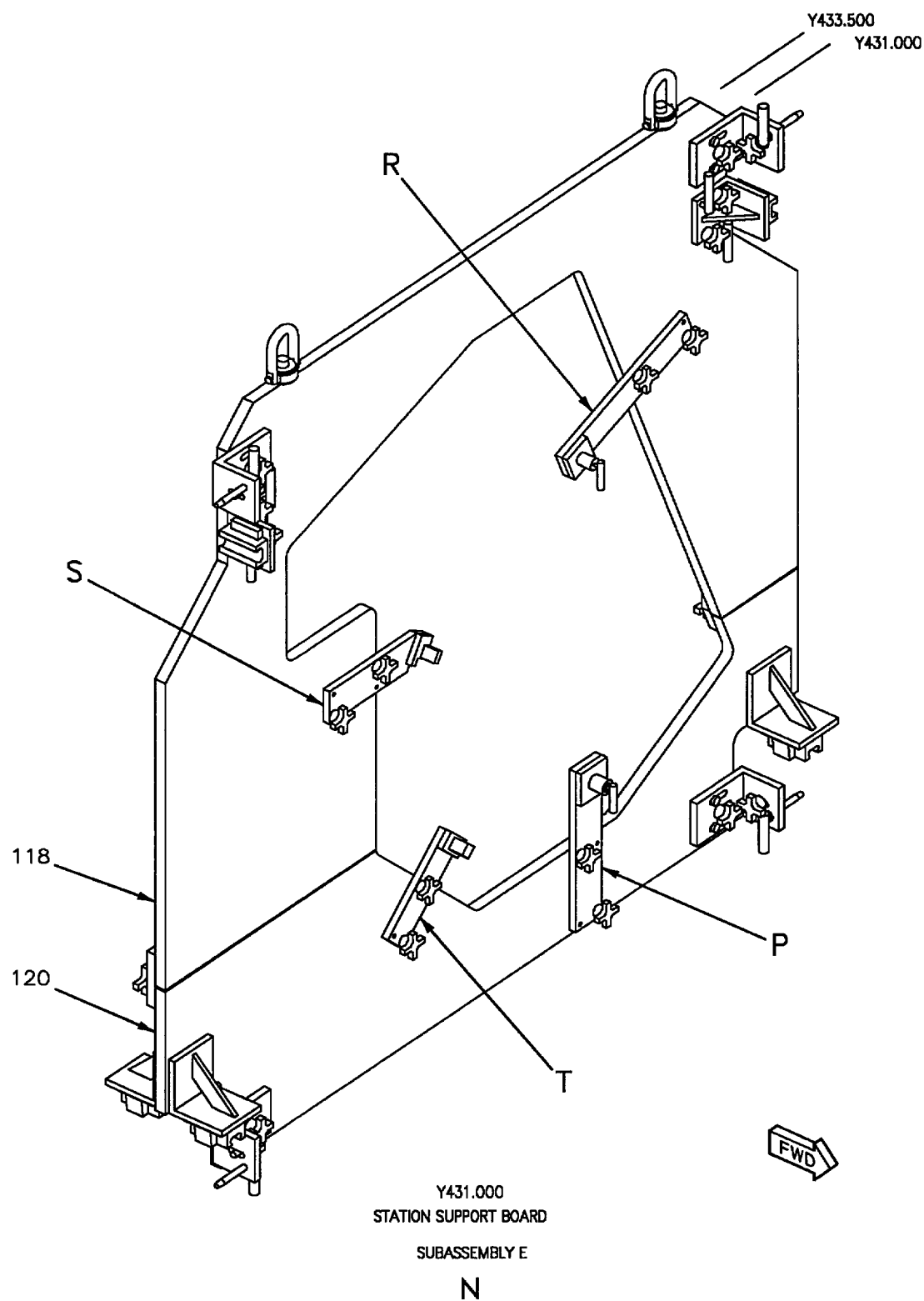
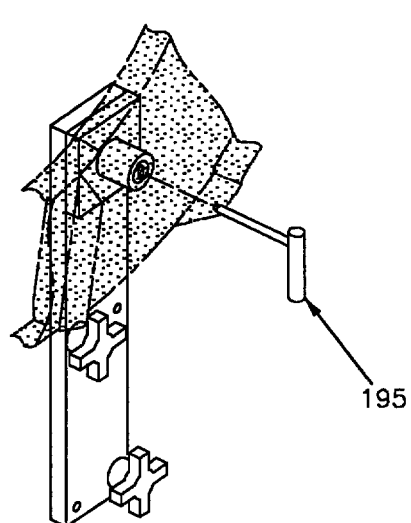
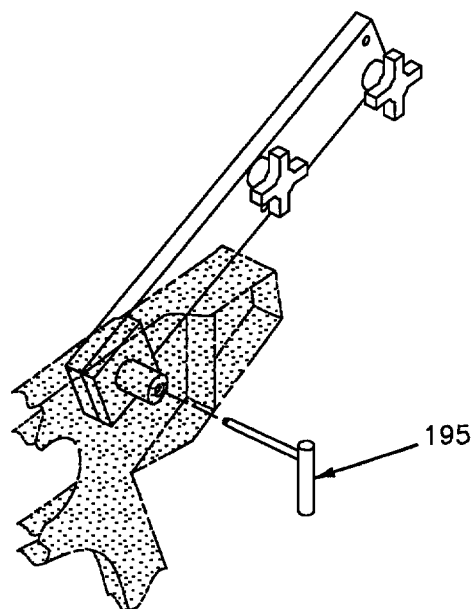


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 6)



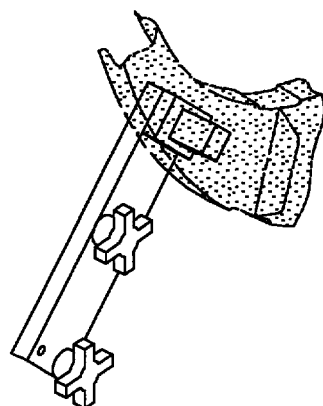
SUBASSEMBLY AW

P



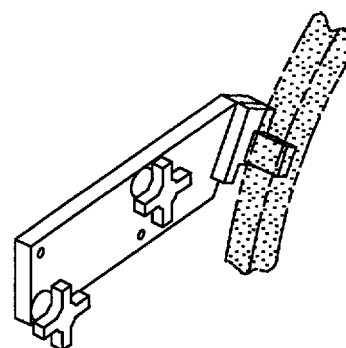
SUBASSEMBLY AU

R



SUBASSEMBLY AZ

T



SUBASSEMBLY BB

S

Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 7)

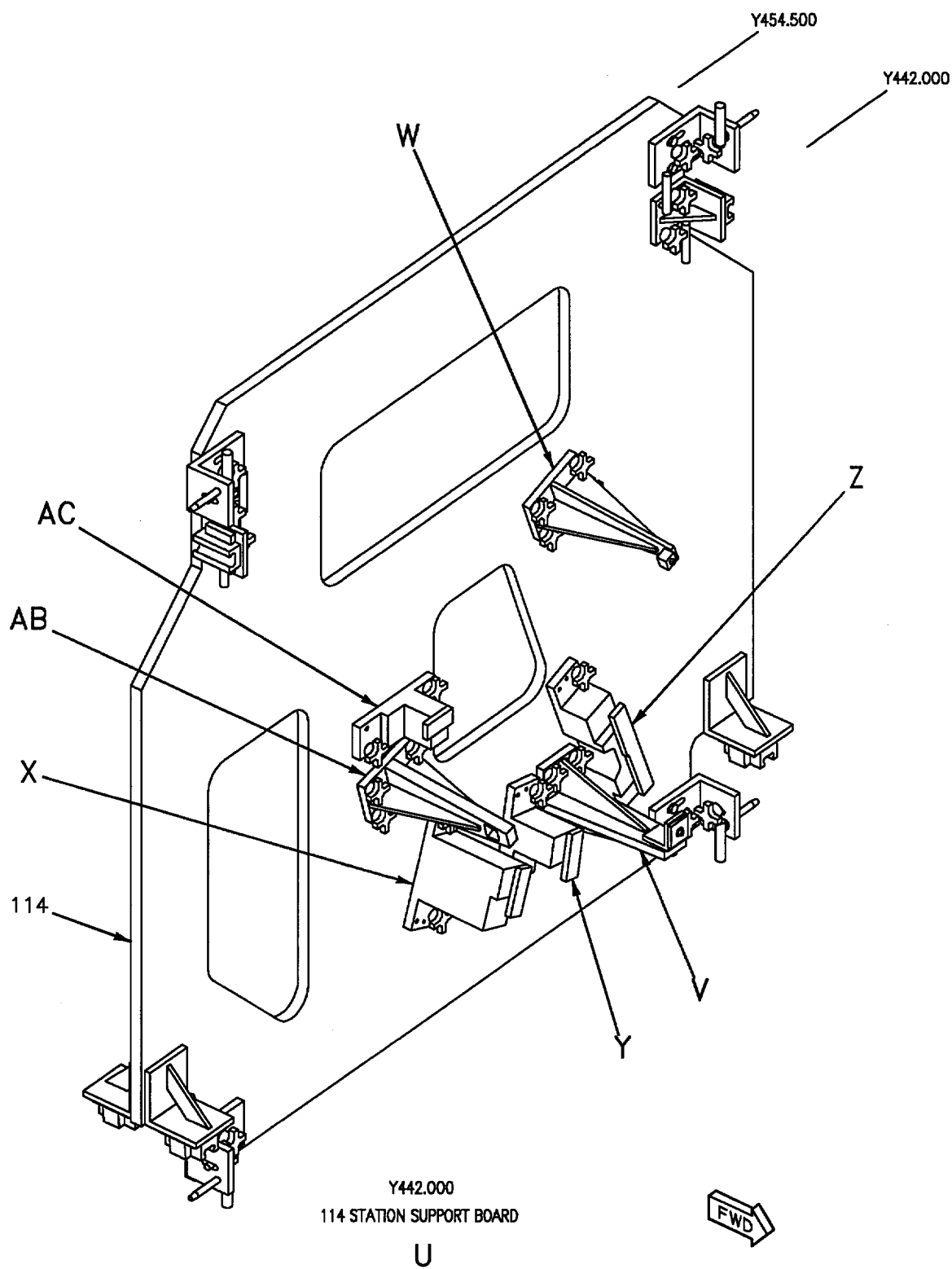


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 8)

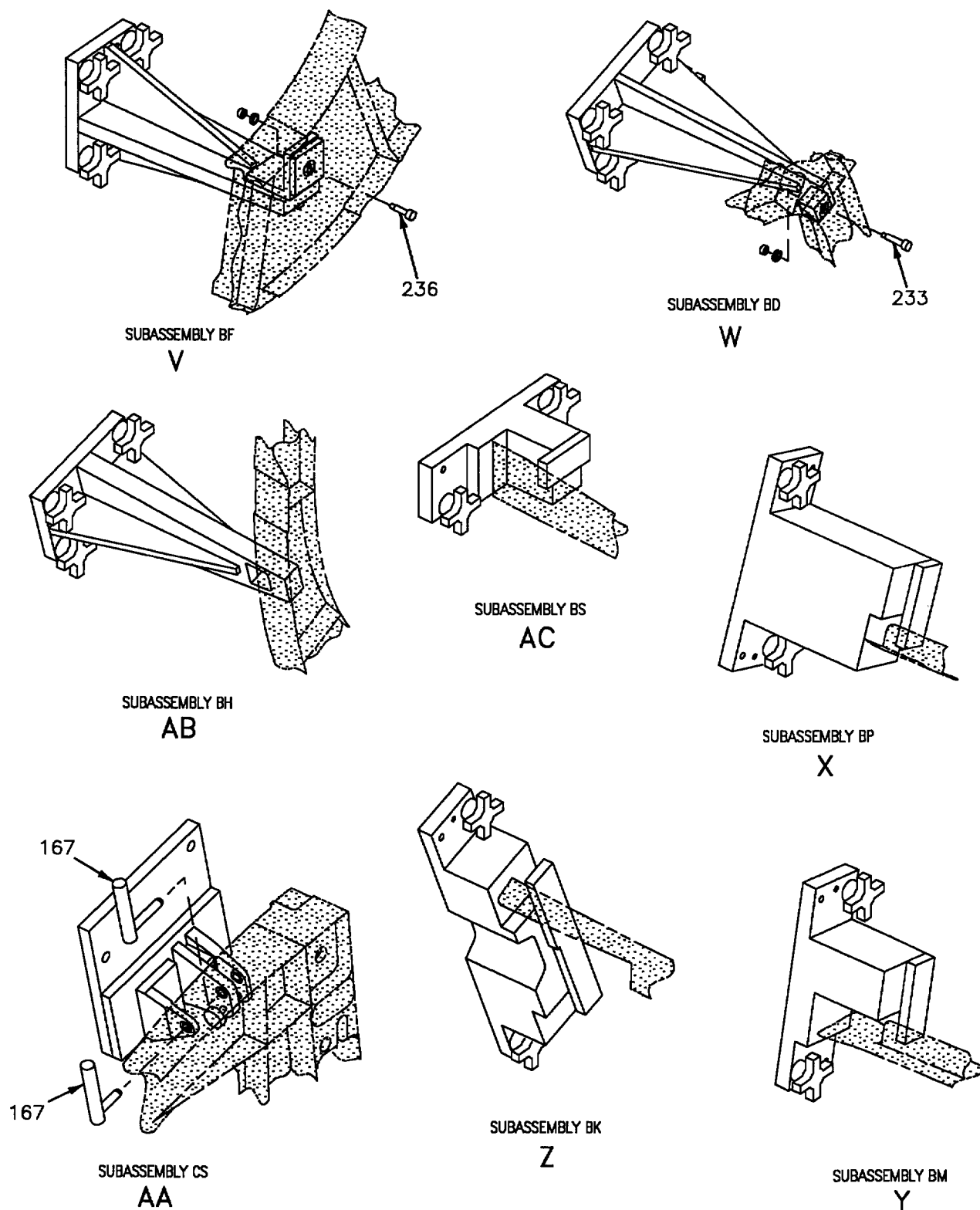


Figure 5. Checking, Removing, Replacing, or Repairing Damaged Inlet Structure (Sheet 9)

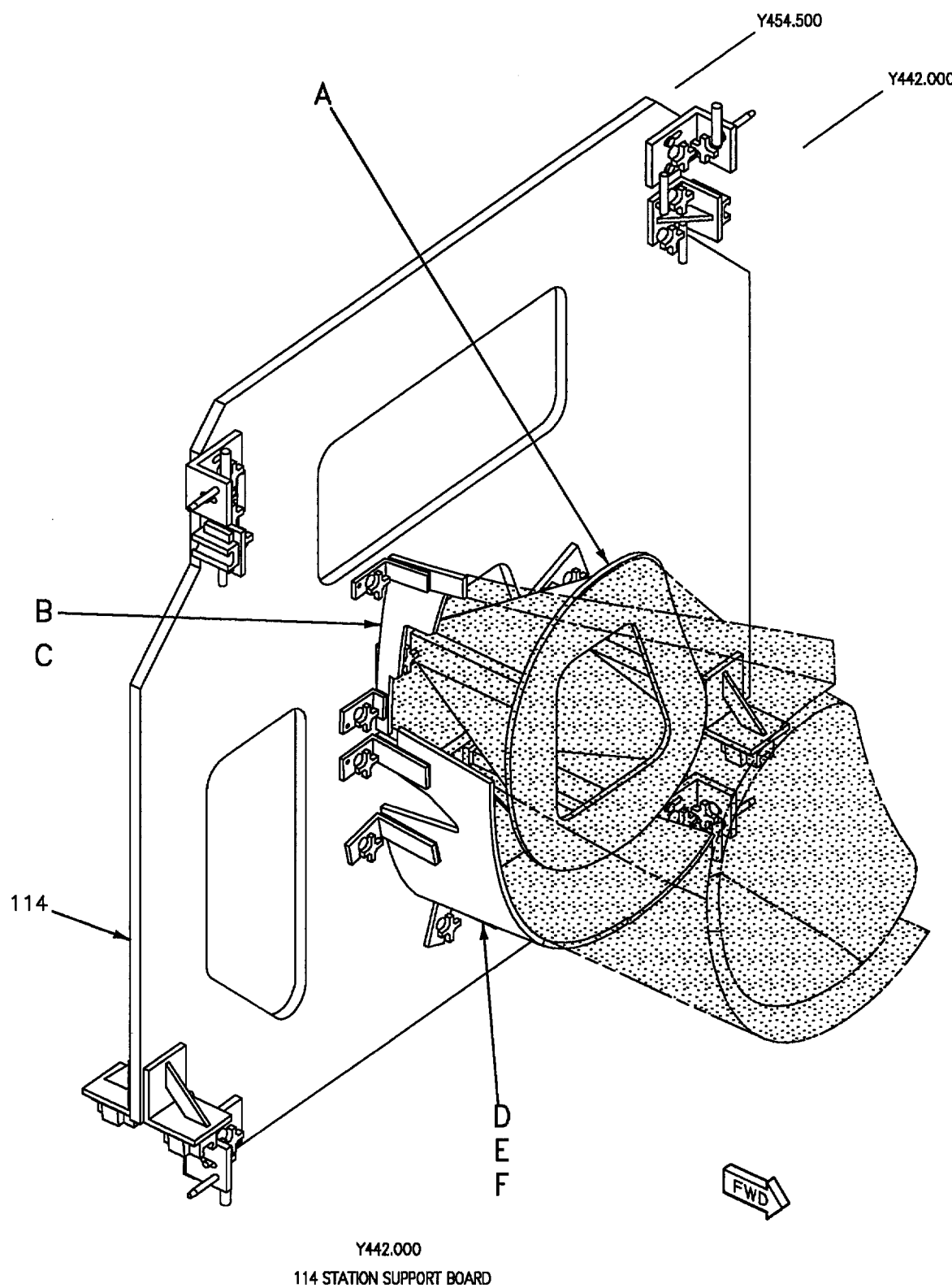
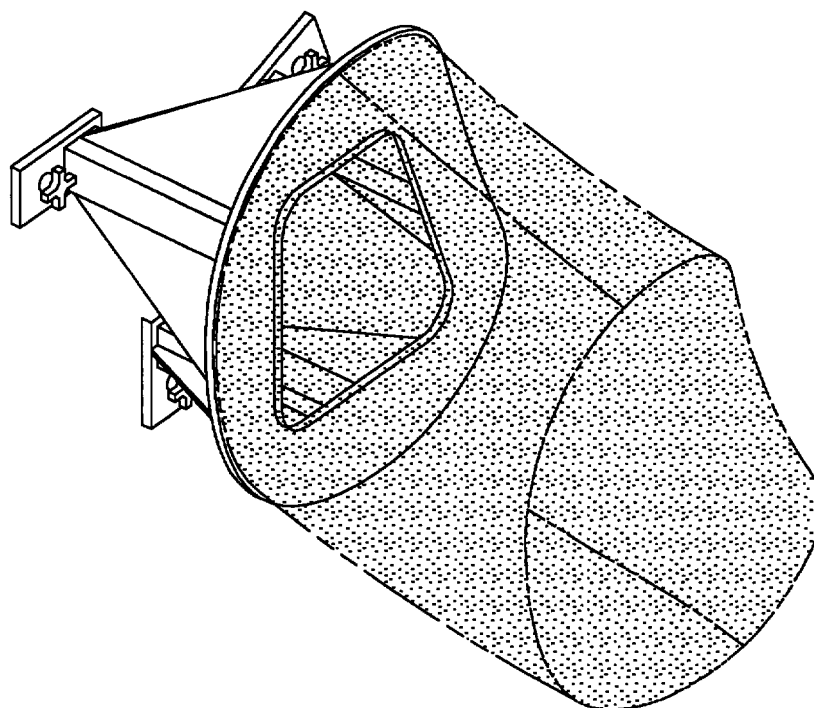
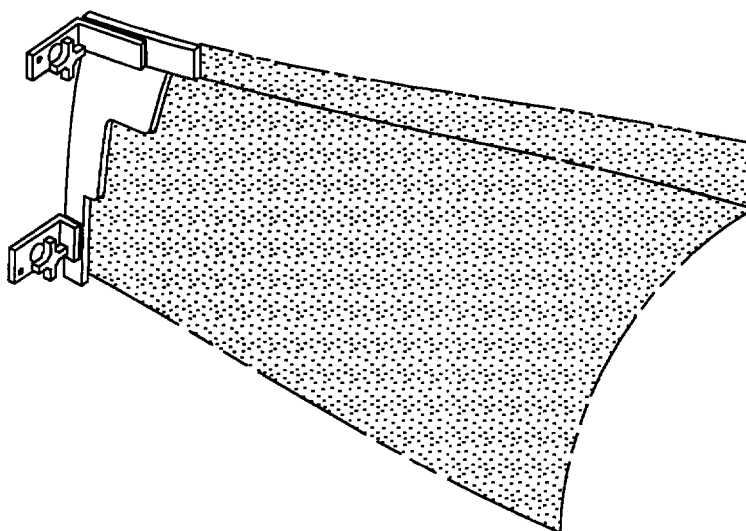


Figure 6. Scribing Aft Theoretical Splice Line (Sheet 1)



SUBASSEMBLY BU

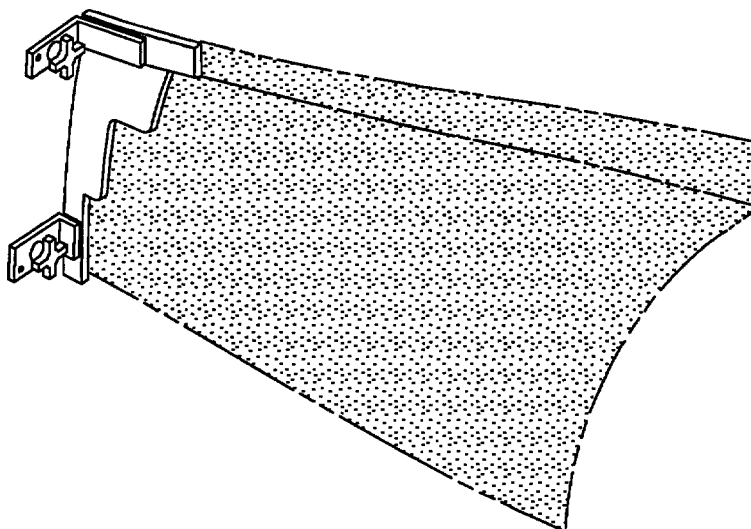
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SUBASSEMBLY BZ

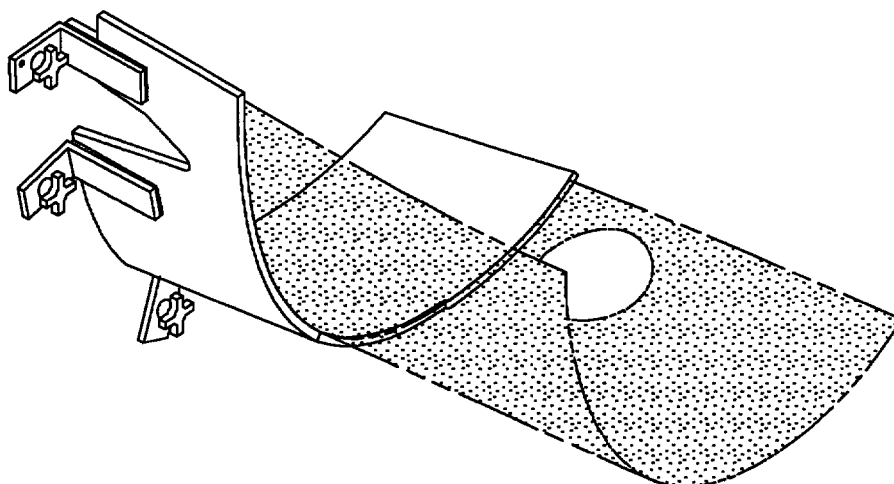
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Figure 6. Scribing Aft Theoretical Splice Line (Sheet 2)



SUBASSEMBLY CF

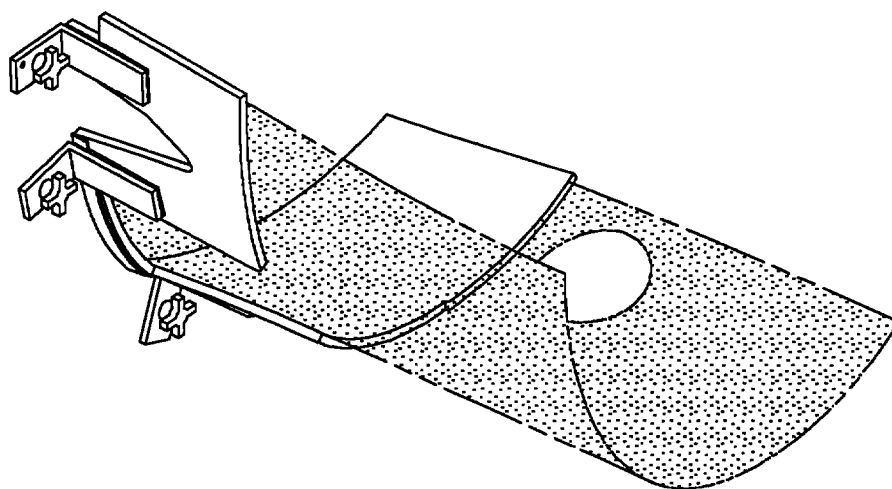
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SUBASSEMBLY BW

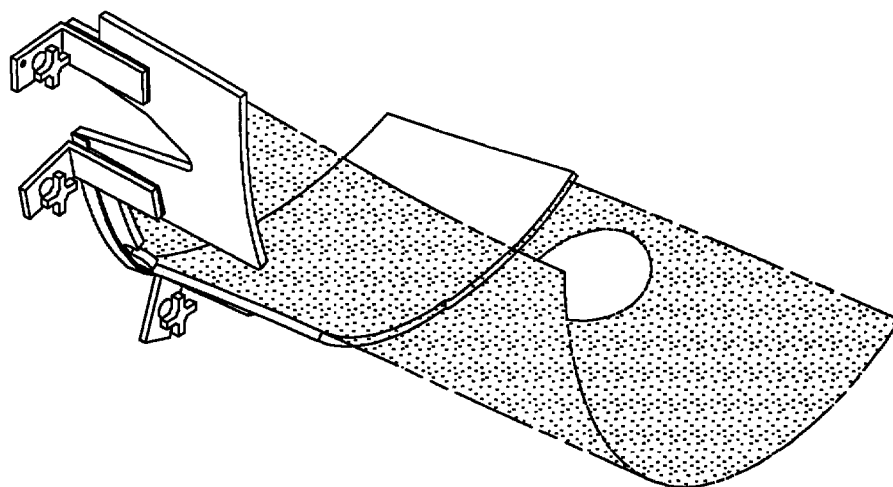
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Figure 6. Scribing Aft Theoretical Splice Line (Sheet 3)



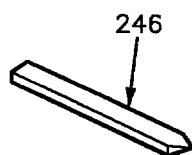
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E



SUBASSEMBLY CD

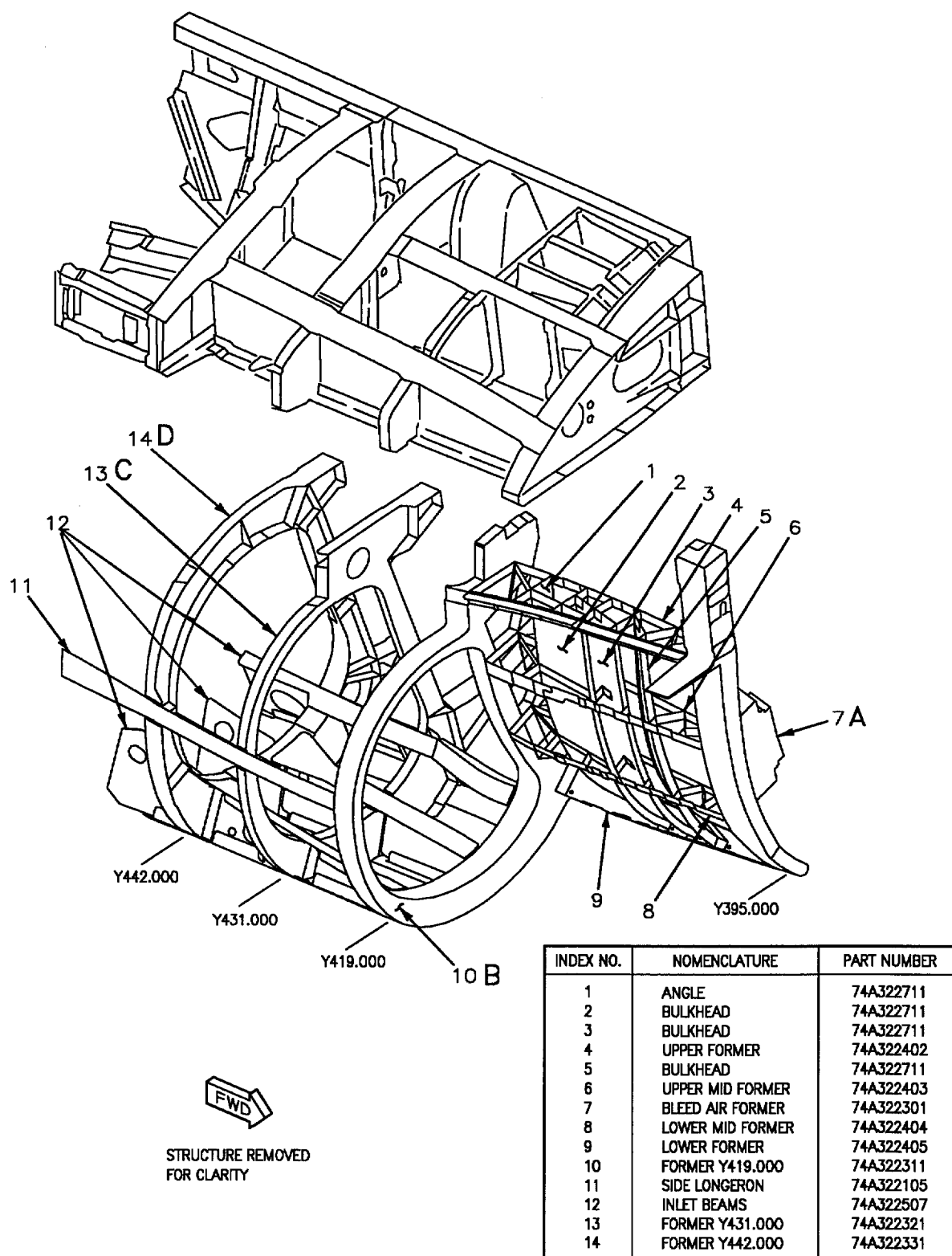
F



FLAT SCRIBE

G

Figure 6. Scribing Aft Theoretical Splice Line (Sheet 4)



04000701

Figure 7. Separation of Inlet Into Four Units, for Accessibility, While Reworking (Sheet 1)

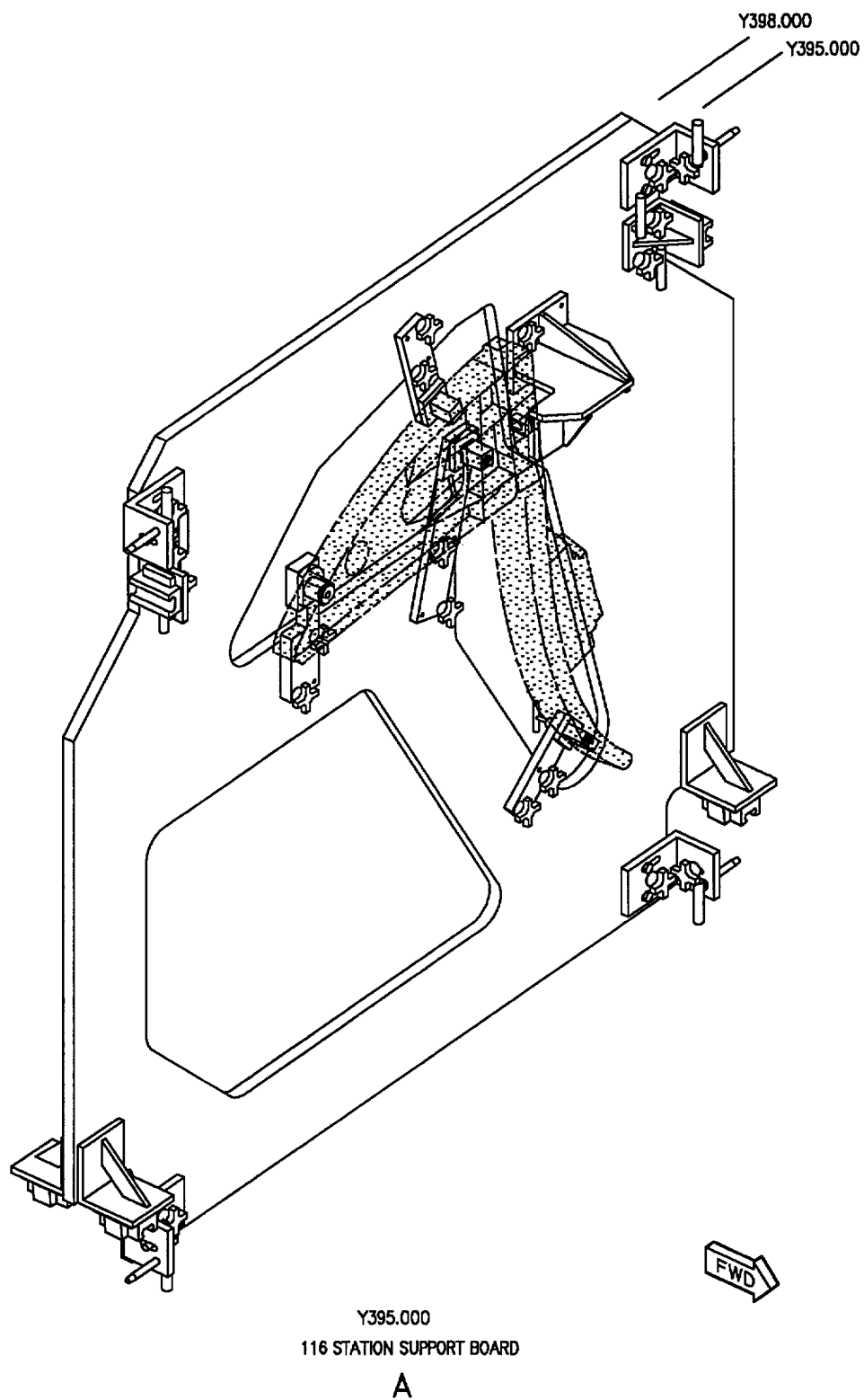


Figure 7. Separation of Inlet Into Four Units, for Accessibility, While Reworking (Sheet 2)

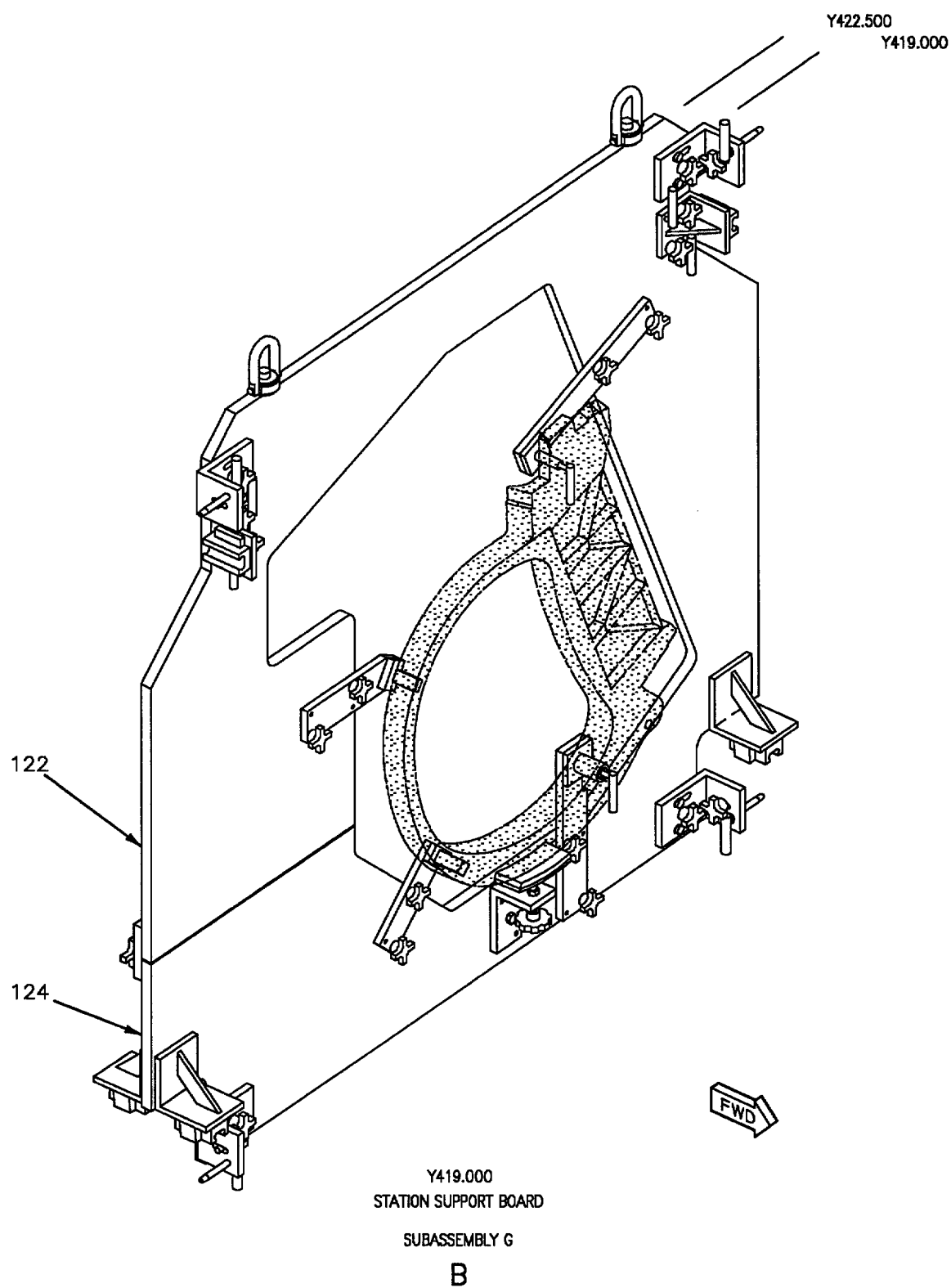
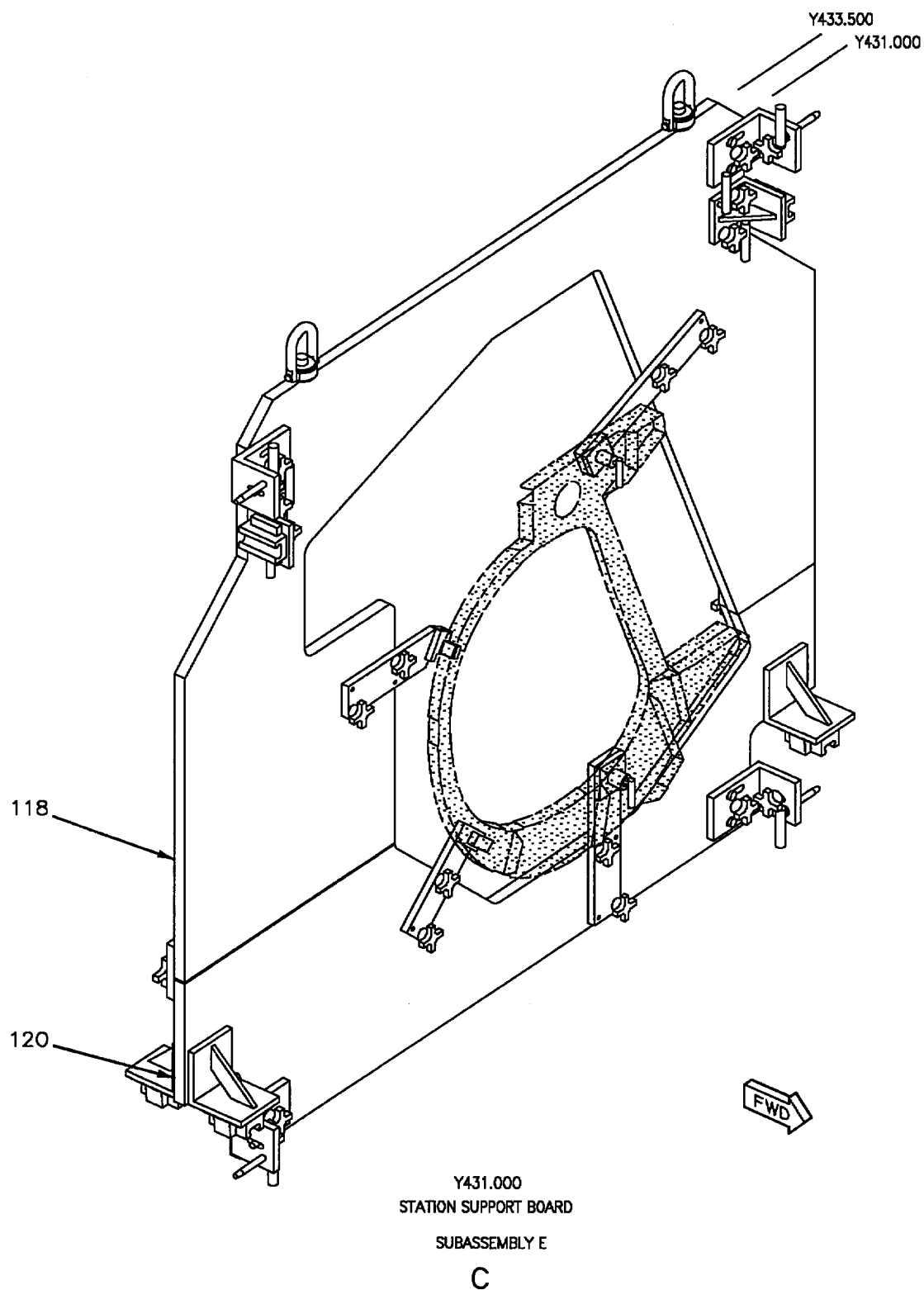


Figure 7. Separation of Inlet Into Four Units, for Accessibility, While Reworking (Sheet 3)



04000704

Figure 7. Separation of Inlet Into Four Units, for Accessibility, While Reworking (Sheet 4)

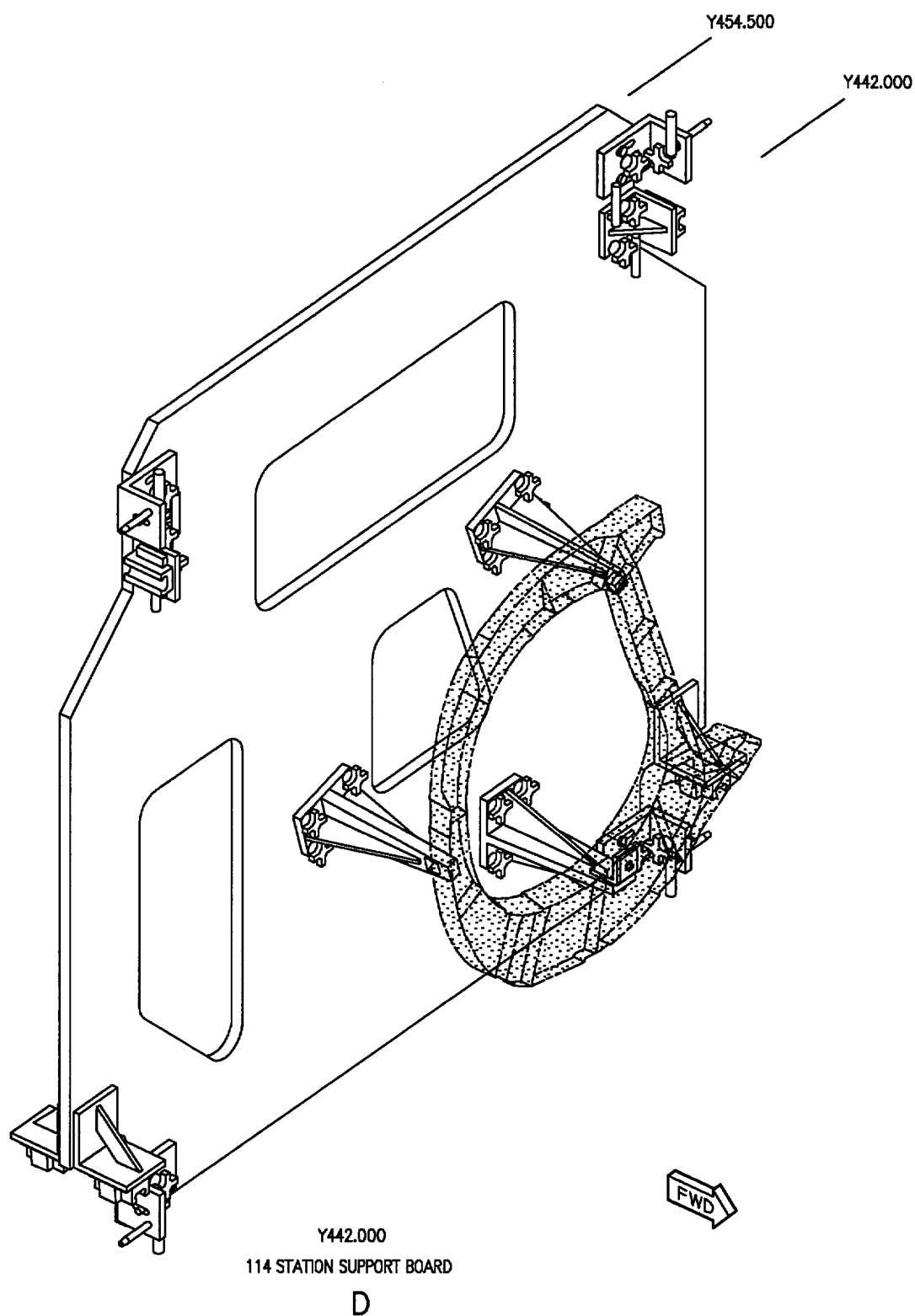
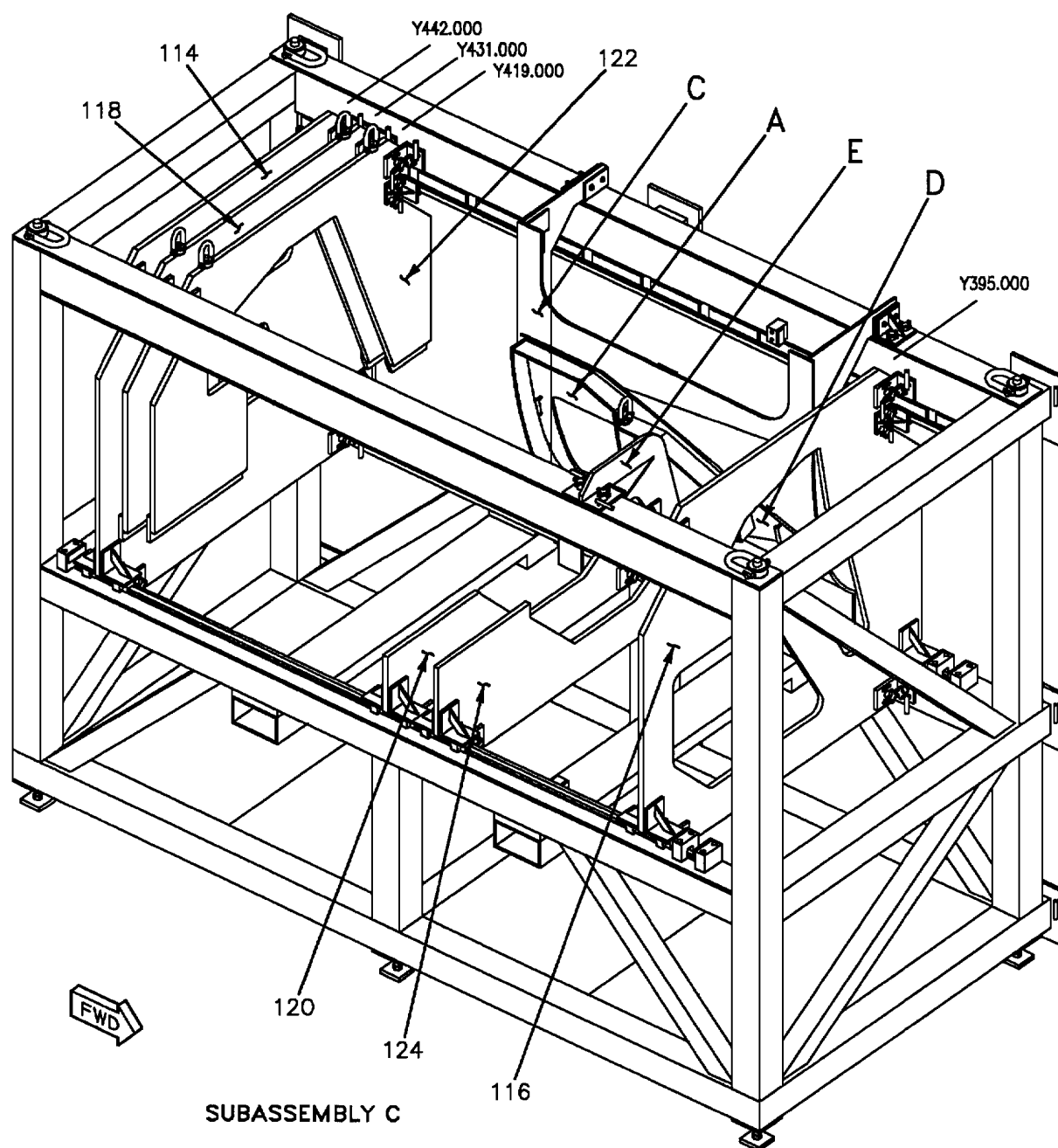


Figure 7. Separation of Inlet Into Four Units, for Accessibility, While Reworking (Sheet 5)



SUBASSEMBLY C

LEGEND

1. Y395.000 MOVED FORWARD
Y442.000 MOVED AFT
Y431.000 TOP MOVED AFT
Y419.000 TOP MOVED AFT

2. HOLE NUMBER 1 ONLY ON 163427 THRU 163473.

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 1)

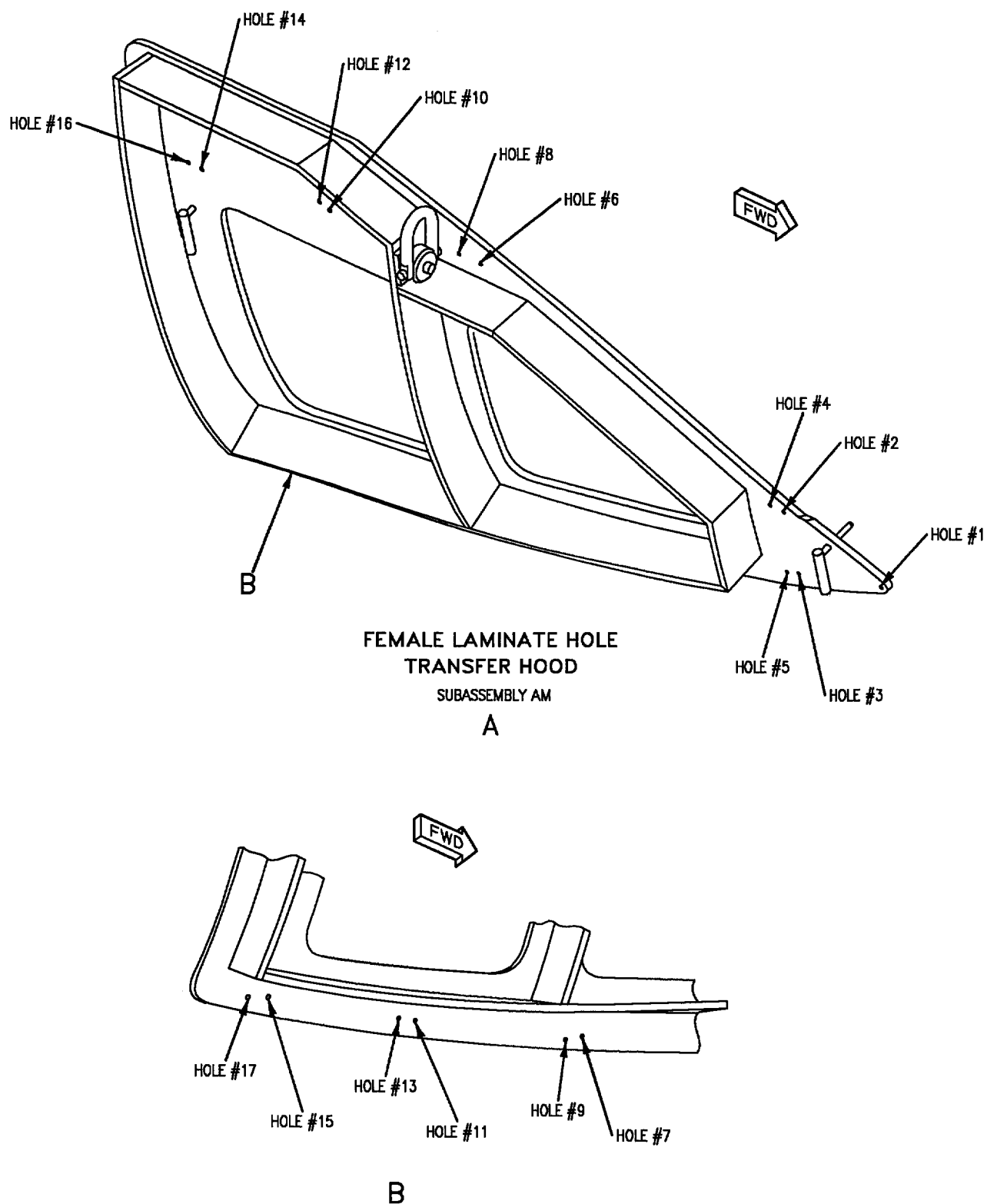


Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 2)

TABLE 5. INDEX PIN CHART FOR
HOLES 1 THRU 17

HOLE NUMBER	DET.	HOLE DIA.
2 → 1	200	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	201	0.2495 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	202	0.3125 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
6 THRU 13	201	0.2495 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
14 AND 16	200	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
15 AND 17	203	0.3115 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$

TABLE 6. HOLE INFORMATION

HOLE NUMBER	Y AND Z LOCATIONS		HOLE DIA.		HOLE TOL.	DET.
	Y	Z				
1	387.020	97.043	0.281		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199
2	394.450	99.900	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
3	394.450	94.430	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
4	395.550	99.950	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
5	395.550	93.970	0.250	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
6	418.100	109.150	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
7	418.380	80.737	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
8	419.850	109.150	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
9	419.620	85.373	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
10	430.420	107.780	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
11	430.420	83.030	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
12	431.530	107.780	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
13	431.590	82.800	0.250		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
14	441.420	105.690	0.281		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
15	441.260	80.790	0.312		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199
16	442.530	105.690	0.281		$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
17	442.680	80.580	0.312		$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	199

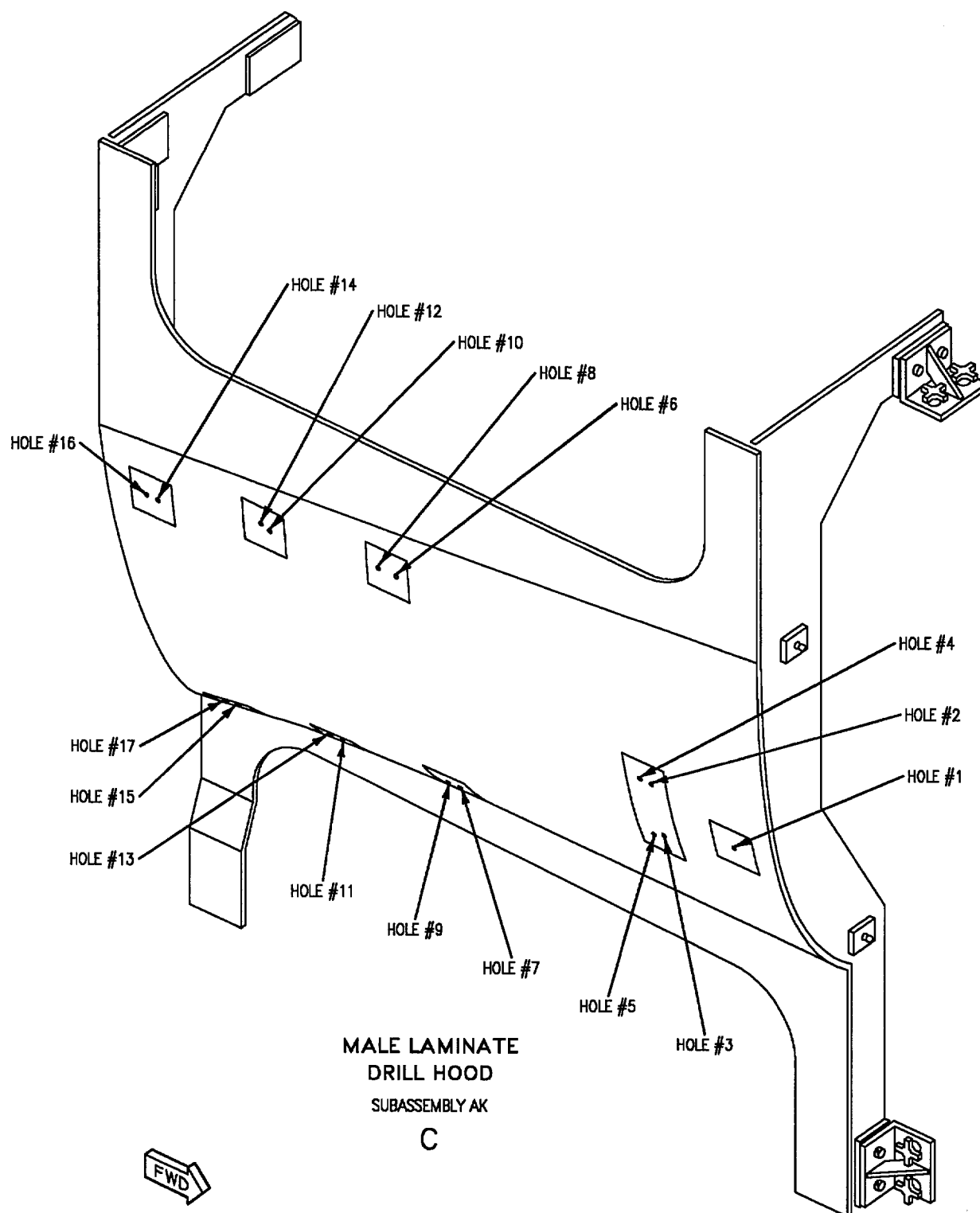


Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 4)

TABLE 7. INDEX PIN CHART FOR
HOLES 1 THRU 17

HOLE NUMBER	DET.	HOLE DIA.
1	193	0.2570 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
2 THRU 5	194	0.3125 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
6 THRU 13	195	0.2500 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
14 AND 16	196	0.2805 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$
15 AND 17	197	0.3110 $\begin{smallmatrix} +0.0000 \\ -0.0005 \end{smallmatrix}$

TABLE 8. HOLE INFORMATION

HOLE NUMBER	STATION LOCATION	SHIM REQ'D		HOLE DIA.	HOLE TOL.	DET.
		OFFSET	DET.			
1	387.020	0.060	173	0.257	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	182
2	394.450	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	199
3	394.450	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
4	395.550	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
5	395.550	0.150	174	0.313	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	183
6	418.100	0.150	175	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
7	418.380	0.160	176	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
8	419.850	0.150	175	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
9	419.620	0.160	176	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
10	430.420	0.060	177	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
11	430.420	0.140	178	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
12	431.530	0.060	177	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
13	431.590	0.140	178	0.250	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	184
14	441.420	0.130	179	0.281	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	185
15	441.260	0.140	180	0.312	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	186
16	442.530	0.130	179	0.281	$\begin{smallmatrix} +0.006 \\ -0.000 \end{smallmatrix}$	185
17	442.680	0.140	180	0.312	$\begin{smallmatrix} +0.007 \\ -0.000 \end{smallmatrix}$	186

Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 5)

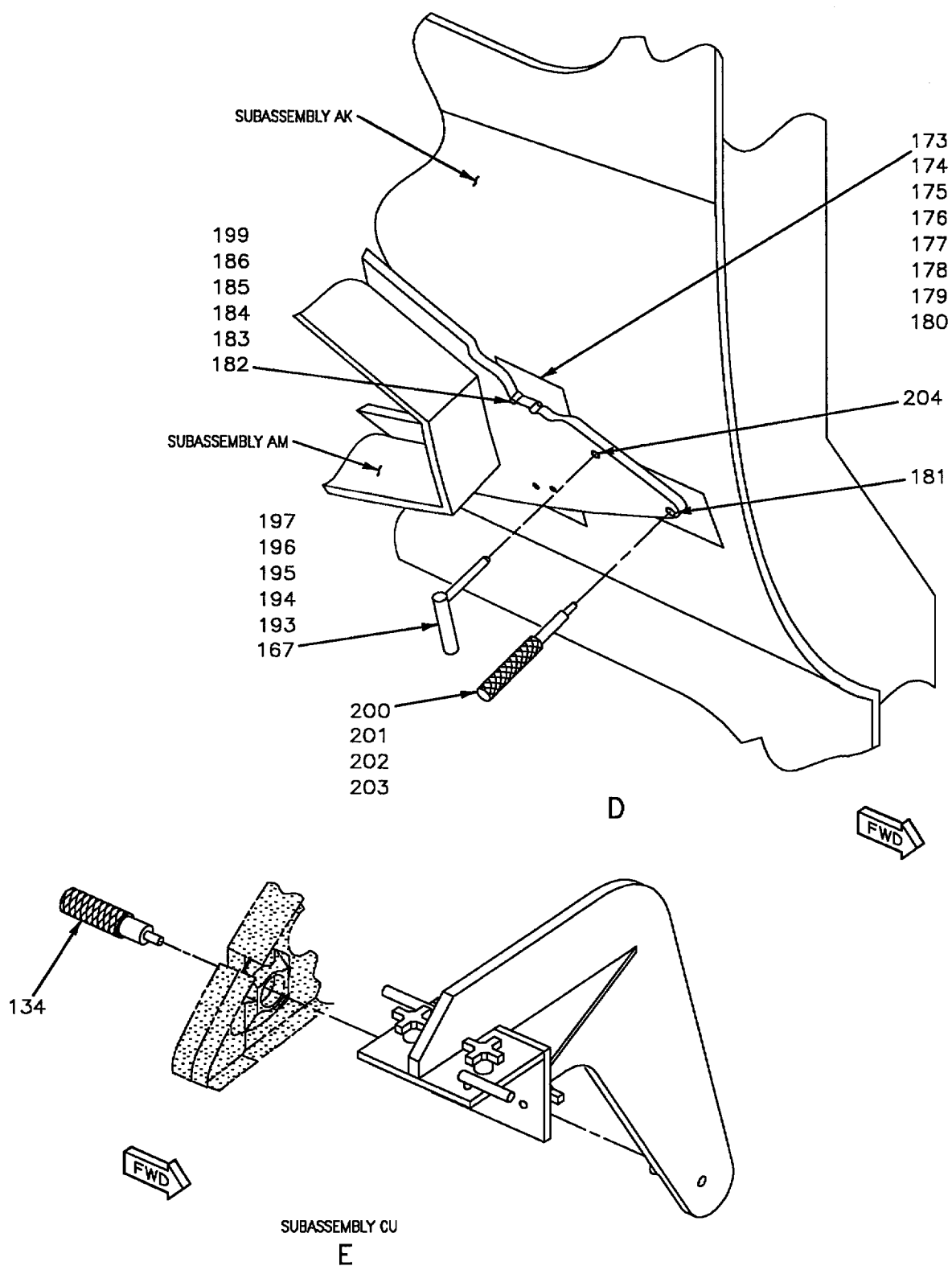
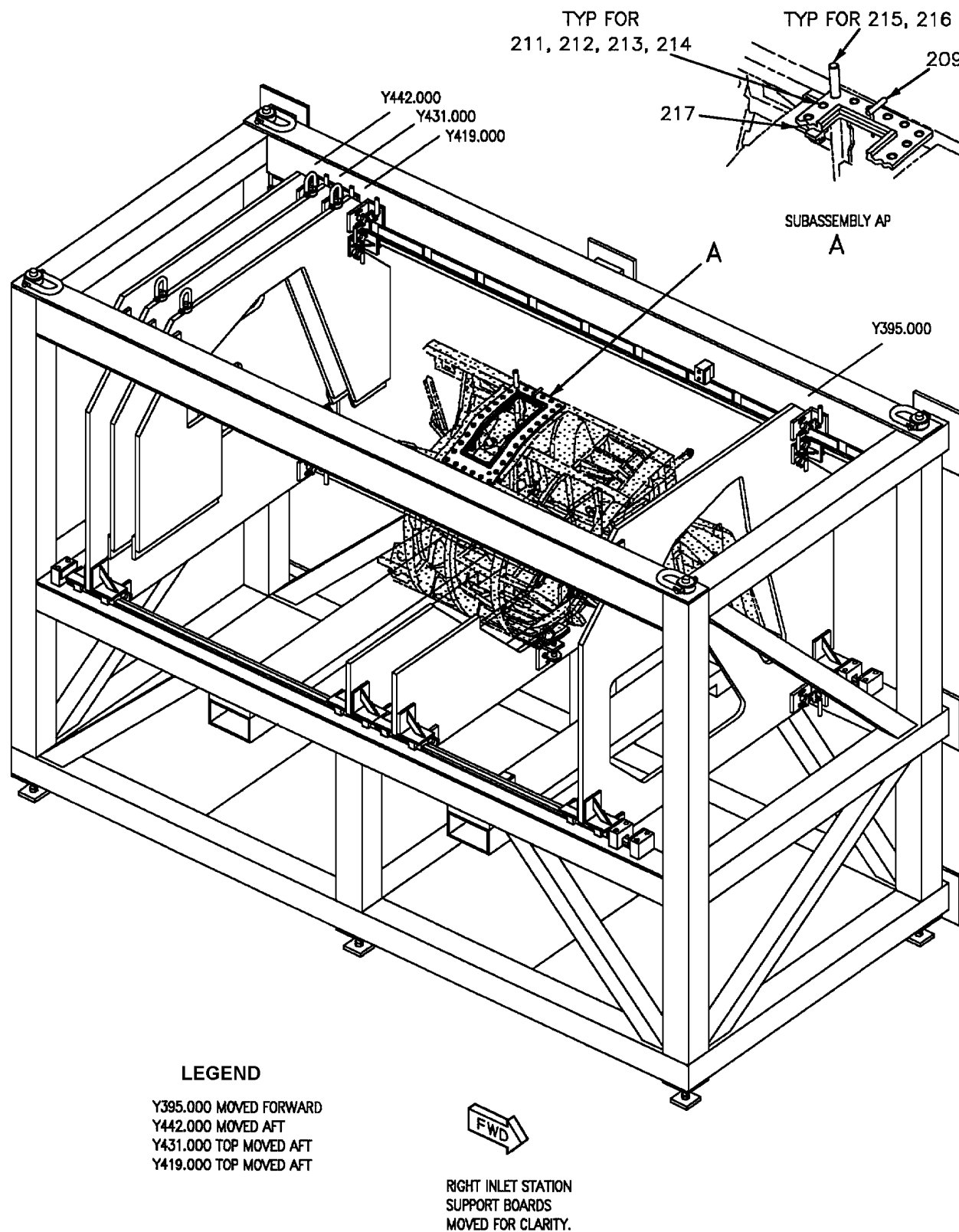
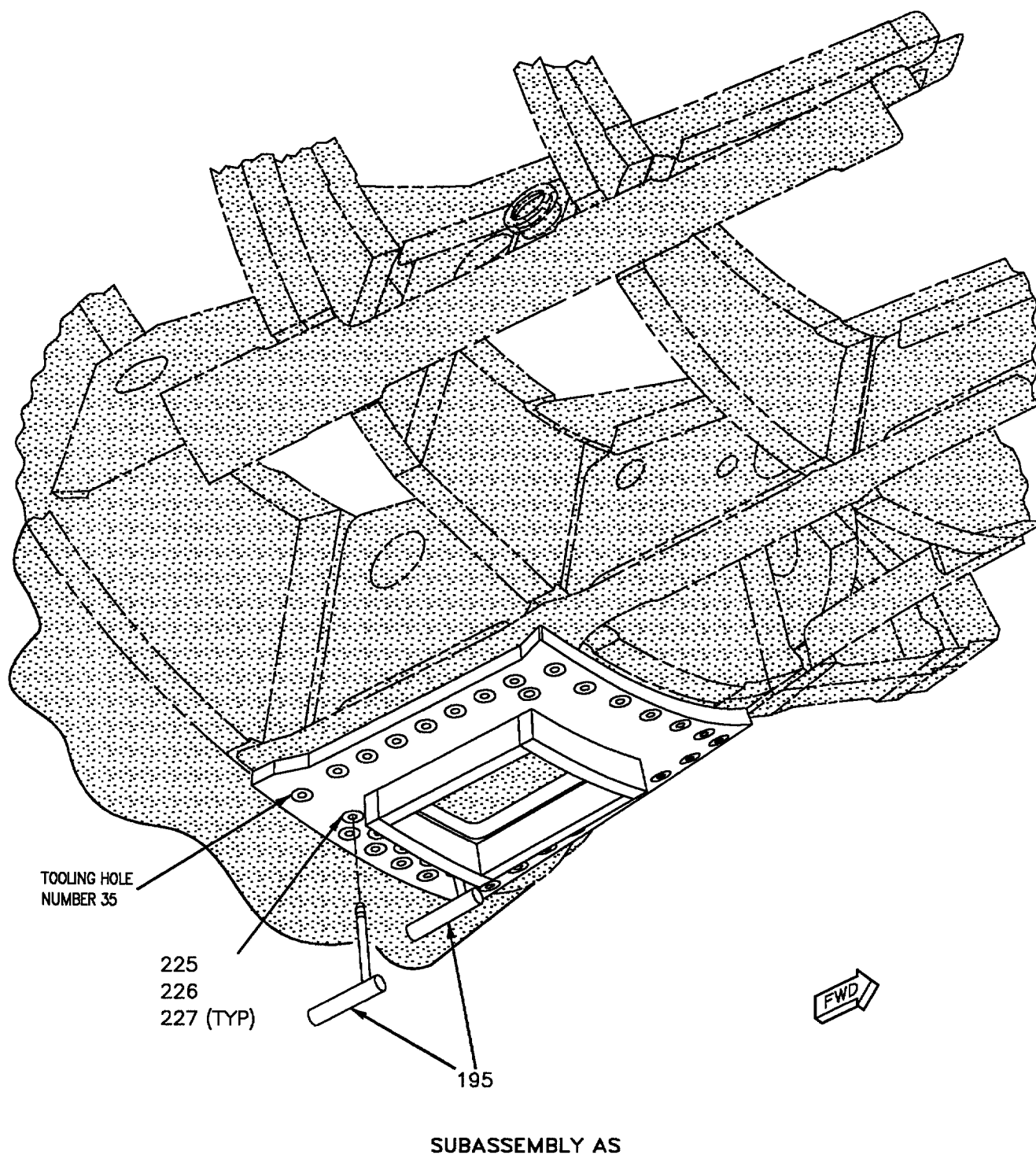


Figure 8. Repair to Inlet for Reinstallation on Same Aircraft (Sheet 6)



040009

Figure 9. Locating and Drilling Attach Hole Pattern in Upper LEX Substructure for Access Cover 74A322609



040010

Figure 10. Locating and Drilling Attach Hole Pattern in Lower Inlet Sub-structure for Access Cover 74A322680, Between Y442.000 and 453.000, After Inlet is Installed

DEPOT MAINTENANCE

STRUCTURE REPAIR

ENGINE AIR INLET INSTALLATION ALIGNMENT FIXTURE, RE474322020-1/2

Reference Material

Line Maintenance Access Doors	A1-F18AC-LMM-010
Line Maintenance Procedures	A1-F18AC-LMM-000
Structure Repair, Center Fuselage	A1-F18AC-SRM-230
Engine Air Inlet Maintenance Fixture, RE174322020-1 (LH)	WP039 00
Engine Air Inlet Maintenance Fixture, RE174322020-2 (RH)	WP040 00
Structure Repair, Forward Fuselage	A1-F18AC-SRM-220
Leading Edge Extension Removal and Installation	WP041 01
Weapon Control System, System Maintenance With IPB	A1-F18AC-740-300
Aircraft Fuselage Centerline Pylon SUU-62/A Removal and Installation	WP036 00

Alphabetical Index

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Prepare Aircraft for Installation of Inlet	2
Prepare Alignment Fixture	2
Removal of Inlet	3
Removal of Installation Equipment	4
Rigging Alignment Fixture to Structure	2

Record of Applicable Technical Directives

None

1. ENGINE AIR INLET INSTALLATION ALIGNMENT FIXTURE, RE474322020-1/2. See figure 1 and 2.

Support Equipment Required

	Nomenclature	Part Number or Type Designation
2. Engine air inlet installation alignment fixture, RE474322020-1/-2 (alignment fixture) is used to support and align engine air inlet (inlet) during removal or installation. Alignment fixture is made of structural framework with various indexing and location details. It is designed to index to center pylon attach points at Y383.00 and Y419.000, and aircraft hoist point at Y383.000. Adjustment provisions are included at index point details to allow for differences between individual aircraft.	Engine Air Inlet Beam	RE374322020
	Type Removal/Installation Sling (GFE)	
	20 Ton Tripod Jack (GFE)	270AS100 or 782D1100
	Optical Leveling, Theodolite System (GFE)	4000A or equivalent
	Torque Wrench, 0 to 50 Inch-Pounds	-

Materials Required

None

3. PREPARE AIRCRAFT FOR INSTALLATION OF INLET.

- a. Remove center pylon, if required (A1-F18AC-740-300, WP036 00).
- b. Inspect two center pylon attach points, Y383.000 and Y419.000, for cleanliness.
- c. Remove door 58L/R, as applicable (A1-F18AC-LMM-010).
- d. Remove doors 34L/R and 113L/R as applicable (A1-F18AC-LMM-010).
- e. Remove leading edge extension (A1-F18AC-SRM-220, WP041 01).
- f. Support aircraft on four 20 ton tripod jacks (A1-F18AC-LMM-000).
- g. Optically level aircraft with theodolite system.

4. PREPARE ALIGNMENT FIXTURE. See figure 1

- a. Remove subassembly C, view E, if required, two places.
- b. Remove subassembly J, view D, if required.
 - (1) Attach hoisting sling to swivel hoist ring, (detail 168), view D.
 - (2) Remove four cap screws, (detail 172), view D.
 - (3) Remove four L pins, (detail 171), view D.
- c. Loosen subassemblies D and E, views A and C.
 - (1) Loosen four cap screws, (detail 144).
 - (2) Install L pin, (detail 159).

- d. Lower subassemblies D and E, views A and C.

- (1) Remove four cap screws, (detail 144).

- (2) Remove L pin, (detail 159).

- e. Select from L pins, (details 17 or 22), view A, find largest L pin that will slip-fit into center pylon attach point at Y383.000.

- f. Remove selected L pin and hold for later use.

- g. Select from L pins, (details 23 through 25), view C, find largest L pin that will slip-fit into center pylon attach point at Y419.000.

- h. Remove selected L pin and hold for later use.

5. RIGGING ALIGNMENT FIXTURE TO STRUCTURE.

- a. Position alignment fixture for attachment to inlet structure.

- b. Insert step pin, (detail 138), view B, through bushing, (detail 141), through subassembly H, at hoist point at Y383.000.

- c. Thread step pin, (detail 138), through bushing, (detail 141), into barrel nut of aircraft hoist point at Y383.000.

- d. Insert selected L pin, (detail 17 or 22), into subassembly D, view A, and turn to lock.

- e. Move subassembly D, upward until it fits against aircraft mold line and pin is correctly inserted into aircraft index hole.

- f. Install two cap screws, (detail 156), view A, through subassembly D, and thread them into barrel nuts in bulkhead at Y383.000.

- g. Tighten subassembly D, view A, in place by tightening cap screws, (detail 156 and 144).

- h. Insert selected L pin, (details 23 through 25), into subassembly E, view C, and turn to lock.

i. Move subassembly E, upward until it fits against aircraft mold line and pin is correctly inserted into aircraft index hole.

j. Install two cap screws, (detail 156), through subassembly E, and thread them into barrel nuts in bulkhead at Y419.000.

k. Tighten subassembly E in place by tightening cap screws, (detail 156 and 144).

1. Install subassembly J view D.

(1) Adjust weld assembly, (detail 15), until step pin, (detail 135), fits into spherical bearing in leading edge extension of inlet.

(2) Tighten four cap screws, (detail 172), to record X and Z stations.

(3) Attach weld assembly, (detail 15), to angle (detail 143), using L pins, (details 162 and 163).

(4) Install two 2 cap screws, (detail 161), and tighten.

(5) Apply torque paint at edge between angle, (detail 143), and weld assembly, (detail 15).

(6) Using precision measuring equipment and techniques, measure gap between shoulder on step pin, (detail 135), and forward surface of weld assembly, (detail 15).

(7) Record measurement.



Handle subassembly J with care so not to change recorded gap.

(8) Remove step pin, (detail 135), and subassembly J.

6. REMOVAL OF INLET.

a. Attach engine air inlet beam type removal/installation sling (sling) to inlet.

b. Remove all fasteners holding inlet to fuselage (WP048 00 or WP049 00).

c. Install subassembly A, view F, at bottom of inlet at Y419.000 with subassembly F, installed.

d. Install subassembly B, at bottom of inlet at Y431.000 with subassembly G installed.



Do not exceed 13.3 foot pounds. Maximum load of 4,000 pounds on each jack. Use hard wood blocks at former locations.

e. Apply torque, not more than 13.3 foot-pounds, to break off sealant between inlet and airframe.

f. Remove inlet by sliding it forward to clear stove pipe, air inlet aft inner ducting.

g. Remove subassemblies A and B, view F, and stow.

7. INSTALLATION OF REPAIRED OR NEW INLET.

a. Install two subassemblies C, view E, on alignment fixture.

b. Install sling on inlet.

c. Lower inlet into position.

d. Carefully align inlet duct with stove pipe, air inlet aft inner ducting, to get initial fit.

e. Slide inlet full aft along airframe.

f. Install subassembly J, view D.

g. Remove subassembly C, view E, at Y431.000.

h. Align spherical bearing in leading edge extension with bushing in subassembly J, view D, using subassembly C, view E, as alignment device for movement up or down.

i. Insert step pin, (detail 135), through subassembly J, view D, into spherical bearing.

j. Use precision measuring equipment and techniques to verify previously recorded value between shoulder on step pin, (detail 135) and forward surface of weld assembly, (detail 15), view D.

k. Install all new fasteners.

8. REMOVAL OF INSTALLATION EQUIPMENT.

(1) Remove sling from inlet.

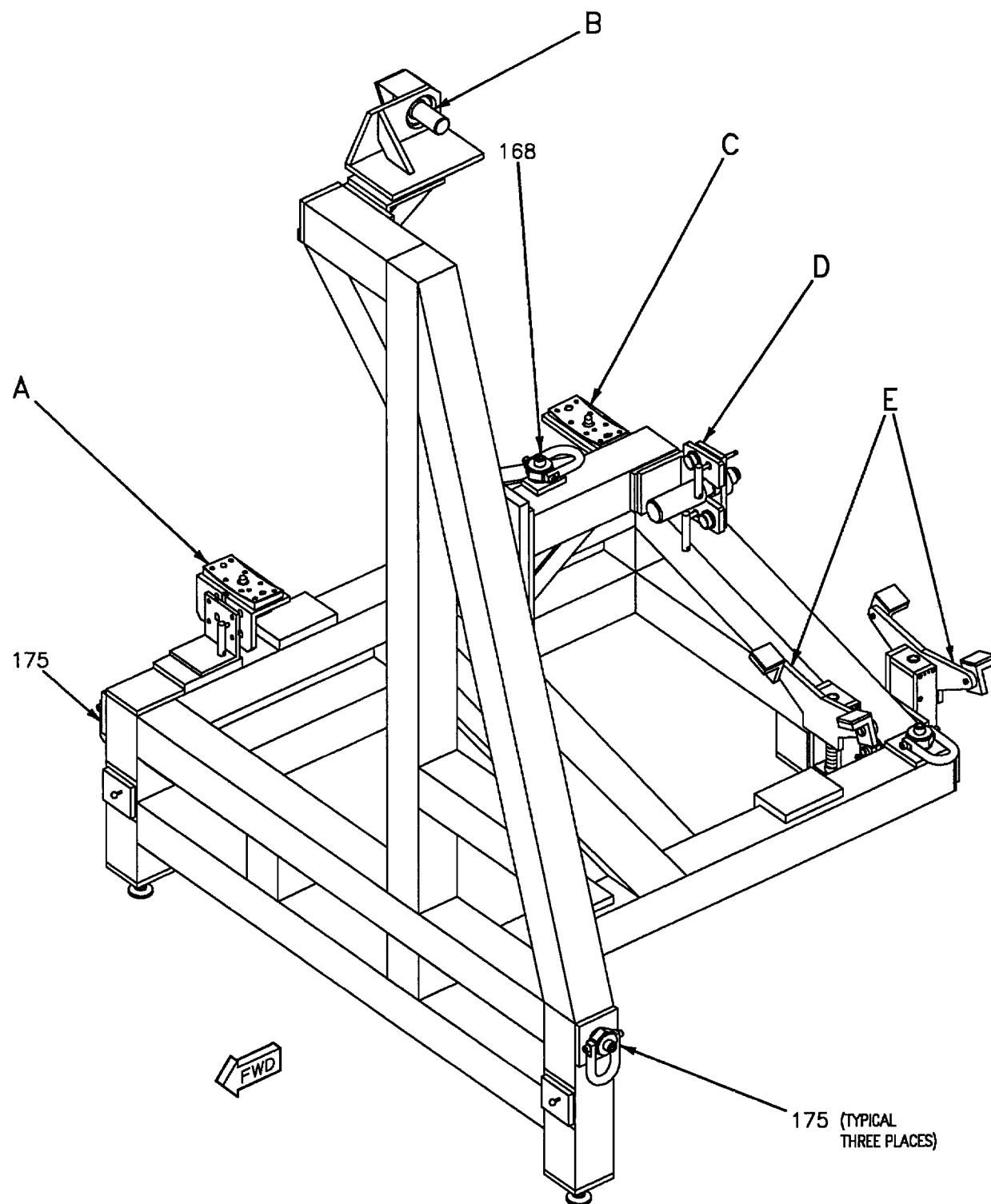
(2) Remove alignment fixture and stow.

(3) Install door 58L/R, as applicable (A1-F18AC-LMM-010).

(4) Install doors 34L/R and 113L/R, as applicable (A1-F18AC-LMM-010).

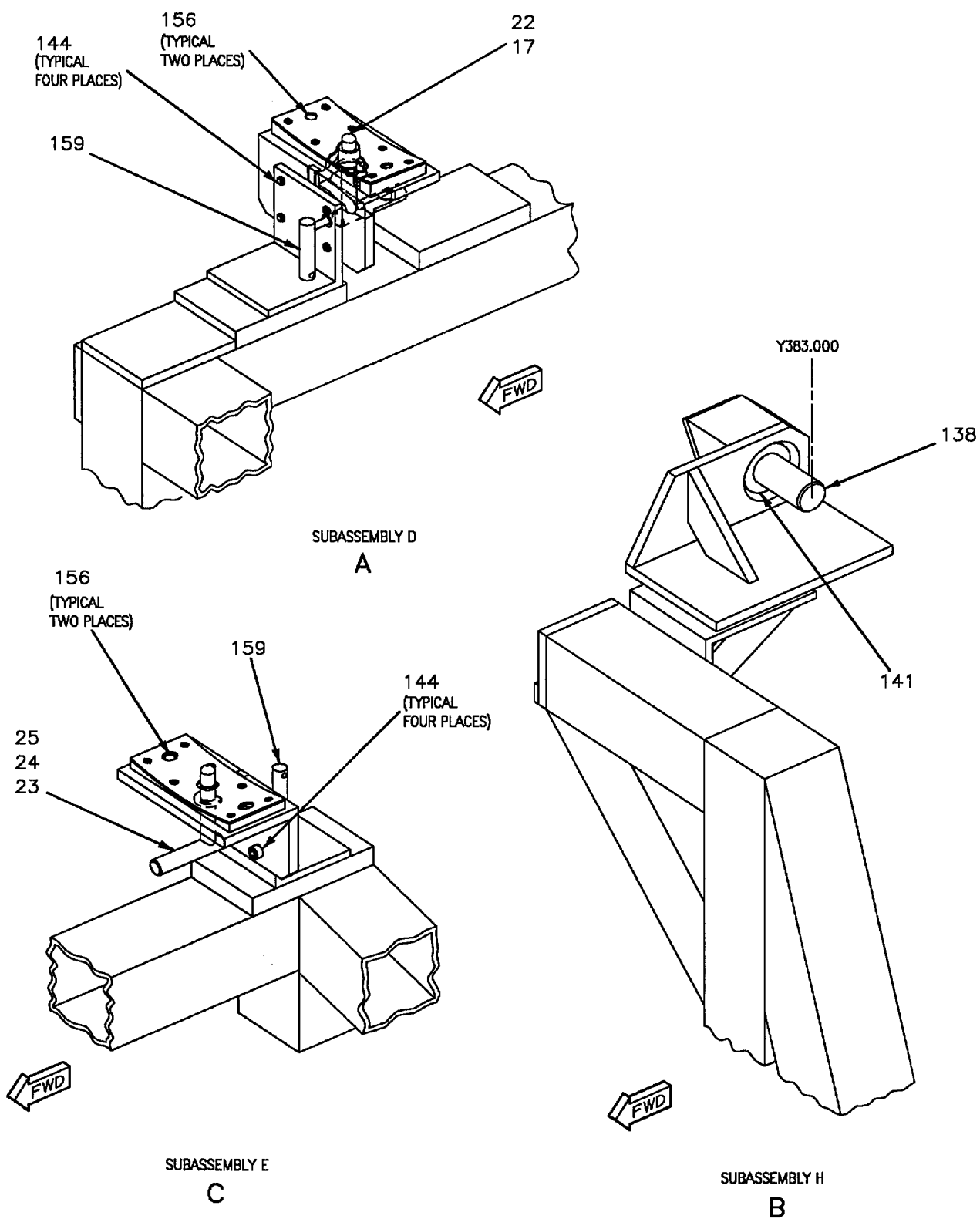
(5) Reinstall center pylon, as required (A1-F18AC-740-300, WP036 00).

(6) Reinstall leading edge extension (A1-F18AC-SRM-220, WP041 01).



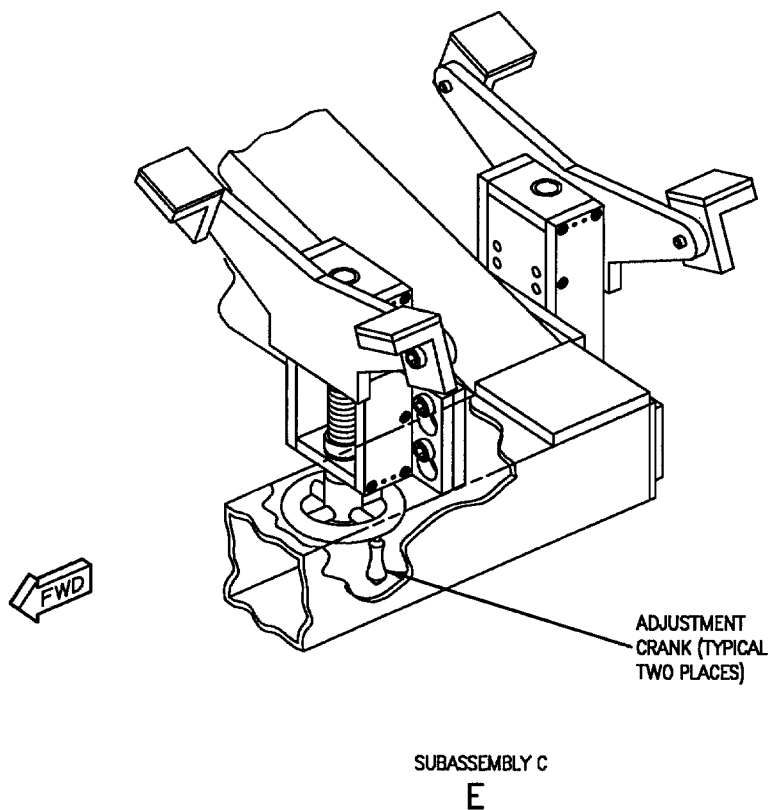
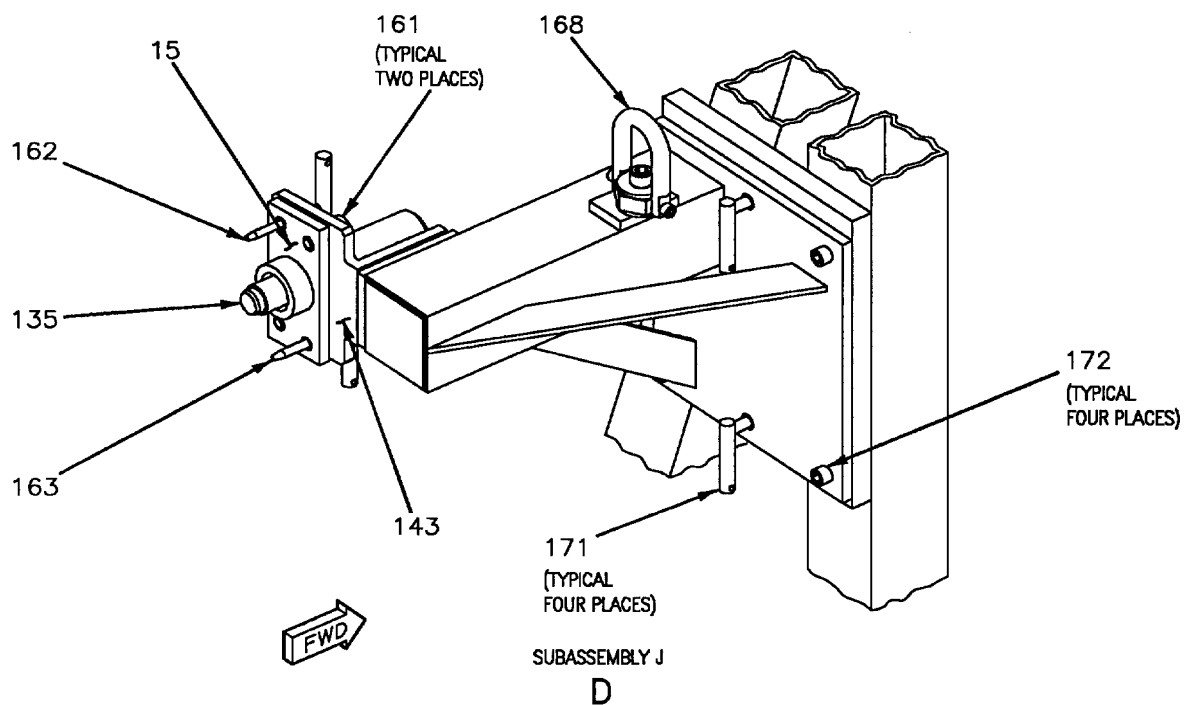
04100101

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 1)



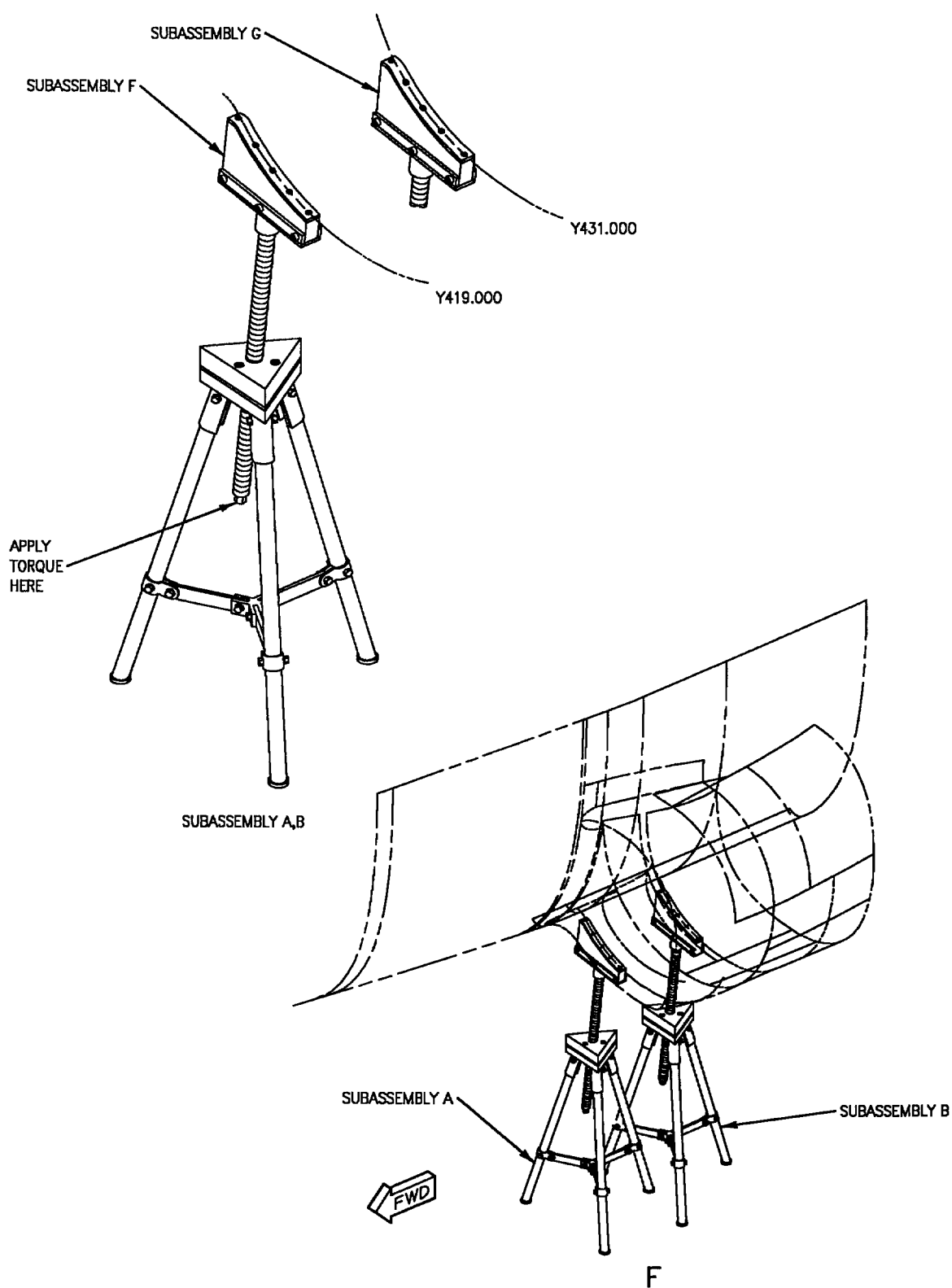
04100102

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 2)



04100103

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 3)



04100104

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 4)

DETAIL NO.	NAME	FUNCTION
Subassembly A	Weld assembly tripod	Holds subassembly F and breaks inlet free from fuselage.
Subassembly B	Weld assembly tripod	Holds subassembly G and breaks inlet free from fuselage.
Subassembly C	Holding assembly	Holds inlet in position.
Subassembly D	Holding and indexing assembly	Index fixture to center pylon at Y383.000.
Subassembly E	Holding and indexing assembly	Index fixture to center pylon at Y419.000.
Subassembly F	Contour block	Break seal between inlet and fuselage.
Subassembly G	Contour block	Break seal between inlet and fuselage.
Subassembly H	Alignment assembly	Align fixture and fuselage at Y383.000, fwd. hoist point.
Subassembly J	Alignment assembly	Align fixture and LEX.
15	Weld assembly	Aligns step pin detail 135.
17	L pin	Alignment at center pylon.
22	L pin	Alignment at center pylon.
23	L pin	Alignment on subassembly E.
24	L pin	Alignment on subassembly E.
25	L pin	Alignment on subassembly E.
135	Step pin	Alignment/gaging LEX.
138	Step pin	Alignment/gaging, Y383.000 hoist point.
141	Bushing	Alignment of detail 138.
143	Angle	Hold detail 15 weld assembly.
144	Cap screw	Hardware on subassembly D/E.
156	Cap screw	Hardware on subassembly D/E.
159	L pin	Alignment on subassembly D/E.
161	Cap screw	Hold weld assembly 15 to angle 143.
162	L pin	Alignment of weld assembly 15.

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 5)

DETAIL NO.	NAME	FUNCTION
163	L pin	Alignment of weld assembly 15.
168	Swivel hoist ring	Hoisting subassembly J.
171	L pin	Alignment of subassembly J.
172	Cap screw	Hardware on subassembly J.
175	Hoist ring	Hoisting alignment fixture.

Figure 1. Engine Air Inlet Installation Alignment Fixture; RE474322020-1/-2 (Sheet 6)

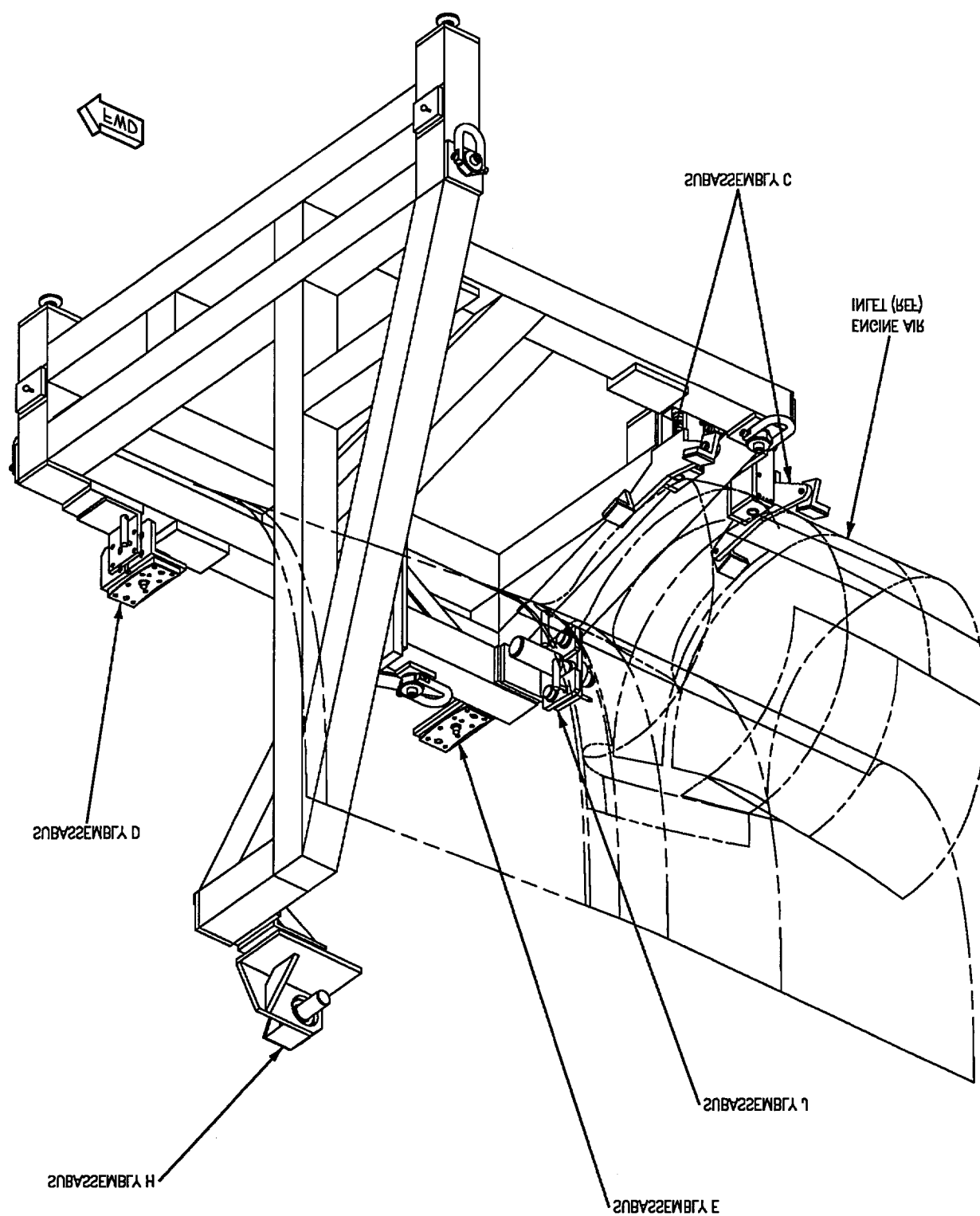


Figure 2. Alignment Fixture With Inlet Installed

